DOCUMENT RESUME

ED 175 319 HE 011 590

AUTHOR Gove, Samuel K., Ed.; Zollinger, Richard A., Ed.
TITLE President's Assembly--State Policy Research at the University of Illinois. Final Report.
PUB DATE Feb 79
NOTE 124p.; Report on an assembly (Crete, Illinois, October 4-6, 1978)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS College Faculty; *Government School Relationship; Higher Education; *Policy Formation; Public Education; *Public Policy; *Research Opportunities; Research Problems; Research Projects; *State Government; State Legislation; State Universities
IDENTIFIERS *University of Illinois

ABSTRACT

The activities at the President's Assembly on State Policy Research at the University of Illinois, which was convened to explore a series of questions related to the interaction between universities and the agencies that create public policy, are reported. The report of the assembly, which is a statement representing general agreement among the participants, is included. The following background papers are included in the report: "The University and State-Sponsored Research: A Faculty Perspective" (Marilyn L. Flynn and James J. Stukel); "State-University Research Cooperation: A Political Commitment?" (Noel G. Ebrahim); "University-State Legislature Interaction" (John W. Ahlen); "Lessons from a Bureaucrat: Or, If You Want to Help Me, Mind My Mandate" (Alexander M. Schmidt); "A Bureaucrat's Perspective of State and University Policy Linkages" (Michael A. Belletire); "A Try at Research: The Illinois Institute for Social Policy" (Roy Wehrle); "Citizen and State Agency Response to University Research on Public Policy: The Case of Illinois: Today and Tomorrow" (Rabel J. Burdge and Ruth M. Kelly); "The California Policy Seminar: A Description and Related Questions" (John Cummins); and "The Pros and Cons of Cooperative State Government-University Public Policy Research" (James P. Harnett). The following speeches presented at the assembly are also included: "Faculty Research in the Public Policy Domain: An Opportunity Facing the University" (Peter E. Yankwich); "The University and the State: Is There a Public Interest in Their Partnership?" (Theodore J. Lowi); and "Perspectives of State Government-University Cooperation: A Legislator's Point of View" (John Vasconcellos). (SC)

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FINAL REPORT

Edited by Samuel K. Gove and Richard A. Zollinger

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State Policy Research at the University of Illinois

FINAL REPORT

Edited by Samuel K. Gove and Richard A. Zollinger
February 1979

PRESIDENT'S ASSEMBLY

State Policy Research at the University of Illinois

Balmoral Woods Inn, Crete, Illinois
October 4-6, 1978

FOREWORD

With major support from the Joyce Foundation, the University of Illinois has over the past few years conducted a number of seminars, assemblies, and workshops involving faculty and staff members from the three campuses of the University. This report summarizes the activities of one such gathering — The President's Assembly on State Policy Research at the University of Illinois.

Institutions of higher education and particularly public institutions in the United States can have major impacts upon the creation of public policy frameworks in state government and in turn are influenced in major ways by such policy frameworks. The purpose of this Assembly was to explore a series of questions related to this interaction between universities and the agencies which create public policy.

The public support of higher education has been the result of one set of public policies. Increasingly, however, the nature and the amount of such support and the kinds of "strings" attached to such support are influenced by public policy decisions in a whole range of areas — many of which at first glance are only remotely associated with education. The quality of public policy decisions is increasingly important to universities and the involvement of university resources in attempting to achieve such quality seems also to be increasingly appropriate.

This Assembly introduces our analysis of the proper involvement of the faculty of the University of Illinois in policy research. It is an early, not a final, step in our consideration of and action upon the topic. The recommendations call for further study and for action, and it is important that we move ahead rapidly with both.

JOHN E. CORBALLY
President, University of Illinois

PREFACE

Interaction and cooperation between university faculty and state government regarding matters of public policy research is not a new occurrence in Illinois. Despite this tradition of cooperation, both parties have expressed, from time to time, suspicions and reservations about the nature and extent of this relationship. Recognizing the increasing importance for the university community, state government and the general public of cooperation in public policy research, the University of Illinois Committee on State Government/ University Relations sponsored the President's Assembly on Public Policy Research at Balmoral Woods Inn, Crete, Illinois, on October 4-6, 1978.

As noted by President Corbally in the foreword, the Joyce Foundation provided the major funding source for the assembly. This foundation, of course, is not responsible for the contents of this volume.

Contained here are the background papers, speeches and the final report of the President's Assembly on State Policy Research at the University of Illinois. All assembly speakers and authors were accorded total freedom in expressing their views. Before publication authors of the background papers were accorded an opportunity to revise their papers in light of the discussions at the assembly. We feel that many of the topics discussed during the conference provide an initial forum for a timely issue certain to face universities in the years ahead. Many of the ideas espoused in the background papers and in the roundtable discussions suggest courses of action which are understandably controversial. We hope that the assembly was "provocative" in the sense that university faculty might begin to rethink and reanalyze the opportunities which lie ahead for continued collaboration with state government in public policy research. No individual participant should be held personally accountable for interpretation of others or for the content of this report.

Attendance at this assembly was limited to an equal number of faculty from the respective campuses and a select number of state government officials from the executive, the legislative, and various agency areas. Faculty participants were selected by members of the planning committee on each campus based on both their experience and their interest in working with state government.

A complete list of participants is included at the end of this volume. The participants were divided into five roundtable sections for discussion and the final report was adopted by the participants at the final plenary session.

We wish to thank the funding agency, the speakers, the background paper authors, the participants, the planning committee, and the staff for contributions to the assembly. We are particularly grateful to Vice-President Peter Yankvich for his early and continuing encouragement in the planning of the asembly. Special appreciation is due Mrs. Anna Merritt for general editorial assistance and to Mrs. Jean Baker for her secretarial and organizational assistance throughout the duration of the project.

SAMUEL K. GOVE
Assembly Director
Director, Institute of Government and Public Affairs
Chairperson, Committee on State Government/University Relations

RICHARD A. ZOLLINGER
Assembly Coordinator, Institute of Government and Public Affairs

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REPORT OF THE ASSEMBLY

At the close of their discussions the participants in the President's Assembly on State Policy Research at the University of Illinois, meeting at Balmoral Woods Inn, Crete, Illinois, October 4-6, 1978, reviewed as a group the following statement. The statement represents general agreement. It should not be assumed, however, that every participant subscribes to every part of the statement.

As a land-grant institution, the University of Illinois seeks to be responsive to the concerns of the citizens of the state of Illinois. Its faculty and staff already participate in collaborative relationships with the state in a wide range of activities, including research on matters involving public policy. The Assembly encourages the strengthening of such research through the utilization and possible expansion of existing linkages between the university and state government.

The Assembly believes that in the future public policy questions will require even closer relationships between state government and institutions such as the University of Illinois, and that this matter should be a continuing item on the agenda of both the university administration and its faculty.

Whether future responses should take the form of new organizational mechanisms remained a point of debate throughout the Assembly. There was, however, consensus that any efforts at innovation should neither diminish nor replace present approaches to research on matters affecting public policy as exemplified by extension service activities, service on state committees and commissions, symposia, and communication networks involving both the university and state government.

In addition to such traditional mechanisms, the university should encourage researchers to develop new approaches for addressing social and technological problems facing the state. Specifically, the university's State Government/University Relations Committee is urged to evaluate experiments in California and

other states which seek to develop cooperative efforts between universities and state government in policy research.

As the committee carries out this assignment, particular attention should be given to:

- Evaluating the purpose and quality of current and proposed modes of cooperation, especially in terms of inducements and impediments to faculty and governmental participation.
- Developing and maintaining up-to-date surveys of research and research capability on matters affecting public policy carried out by university faculty.
- Communicating to all appropriate sectors of the state on the extent of current research at the University of Illinois focusing on state problems.
- Encouraging expanded personal contact between members of the university faculty and various state officials in a variety of settings.
- Planning by the State Government/University Relations Committee for symposia on a broad range of topics pertaining to state policy research. Representatives of the executive branch, the legislative branch, and the judicial branch (where appropriate) of state government should be involved in early symposia planning.

Finally, the Assembly encourages the university's State Government/University Relations Committee to develop recommendations that would implement closer relations between the faculty and state government in policy research but cautions against any plan that would adversely affect the academic independence of the university.

BACKGROUND PAPERS

THE UNIVERSITY AND STATE-SPONSORED RESEARCH: A FACULTY PERSPECTIVE

Marilyn L. Flynn and James J. Stukel

MAGNITUDE OF STATE-SUPPORTED RESEARCH AT THE UNIVERSITY OF ILLINOIS

In FY 1977, the state sponsored grants and contracts for $2.5 million to support research at the three campuses of the University of Illinois. Most of these funds (80 percent) were awarded to the Urbana/Champaign campus. (See Table I.)

The total volume of state-sponsored research at the university is relatively small, if compared with federal expenditures for the same period. The University of Illinois system received $47.6 million during FY 1976 from federal sources, with approximately 84 percent flowing to the Urbana/Champaign campus. (Table I.)

Over the past three years, the Medical Center has increased the amount of federally-supported research grants by nearly one million dollars, while state-supported contracts on that campus have declined from $319,000 to $291,000.

TABLE I. FEDERAL AND STATE-SPONSORED RESEARCH EXPENDITURES AT THE UNIVERSITY OF ILLINOIS, FY 1975-77* (in millions of dollars)

University Campus	Federal Expenditures			State Expenditures		
	FY 1975	FY 1976	FY 1977	FY 1975	FY 1976	FY 1977
Chicago Circle	$ 2.7	$ 2.6	$ 2.8	$ .092	$ .132	$ .144
Medical Center	3.6	4.0	4.5	.319	.374	.291
Urbana/Champaign	35.8	39.5	40.3	1.2	1.9	2.1
Total, University of Illinois	$42.1	$46.1	$47.6	$1.6	$2.4	$2.5
Total, All Illinois Public Universities	$44.8	$49.3	$51.9	$2.2	$3.6	$3.5

Source: Based on figures from Paul E. Lingenfelter, "Study of State-Supported Research," Draft report to the Illinois Board of Higher Education, October 3, 1977. Springfield, Illinois. Mimeo.

* Note: Total state expenditures as shown in Table I do not coincide with totals shown in Tables III and IV. Different original reporting sources were apparently used in the Draft Report to IBHE. However these discrepancies are not considered sufficiently great by the authors of this paper to preclude use of the data.

Circle Campus maintained about the same level of funding from federal sources between FY 1975 and FY 1978, and has slightly increased state-supported research from $92,000 to $144,000. The Urbana/Champaign campus gained $4.5 million in federal funds, and $900,000 in state support between FY 1975 and FY 1977. (Table I.)

Aside from external awards by state agencies in the executive branch, the General Assembly also appropriates unrestricted funds to support research as part of the university budget. These monies are characteristically used to pay for faculty time, "seed grants," cost-sharing in applications to other external sponsors, and to meet overhead costs of research. In FY 1976, the University of Illinois system received $24.4 million in general revenues to support research, of which nearly 80% was allocated to the Urbana/Champaign campus. (See Table II.)

SOURCES OF STATE FUNDS FOR RESEARCH GRANTS AND CONTRACTS

In FY 1976, twenty-eight state agencies awarded $2.9 million for research on one or more of the three University of Illinois campuses. Ten of these twenty-eight agencies provided 90 percent of the total funds.

Agencies responsible for energy and environment spent over $1.2 million, or about 44 percent of total contracts and grants to the University of Illinois system from state sources. Nearly 22 percent, or $773,000, was awarded by health, welfare, and education programs. Approximately 17 percent ($509,500) was given by state agencies in commerce, economic development, or transportation. The single largest granting agency was the Department of Transportation. (See Tables III, IV.)

MECHANISMS USED TO DEVELOP UNIVERSITY–STATE RESEARCH CONTRACTS

There are no formal channels for university-wide dissemination of Requests for Proposal by State agencies. Most contracts with faculty are developed as

TABLE II. UNRESTRICTED STATE SUPPORT FOR RESEARCH AT THE UNIVERSITY OF ILLINOIS, FY 1976 (in thousands of dollars)

University Campus	Departmental Research	Research Centers	Competitive Faculty Grants	Cost Sharing	Overhead Allocations	Total State Support
Chicago Circle	$ 515.9	$ 481.6	—	$ 549.8	$ 1,009.2	$ 2,555.5
Medical Center	1,821.8	40.3	$ 47.9	—	326.6	2,236.6
Urbana/Champaign	4,245.3	8,660.2	319.2	852.1	5,025.9	19,103.7
General University	—	385.2	—	—	118.8	504.0
Total, University of Illinois	$ 6,583.0	$ 9,567.3	$ 367.1	$1,401.9	$ 6,480.5	$24,399.8
Total, All Illinois Public Universities	$14,359.8	$12,546.1	$1,437.9	$2,590.5	$10,715.3	$41,649.6

Source: Based on figures from Paul E. Lingenfelter, "Study of State-Supported Research," Draft report to the Illinois Board of Higher Education, October 3, 1977. Springfield, Illinois. Mimeo.

TABLE III. STATE AGENCY EXPENDITURES ON RESEARCH GRANTS AND CONTRACTS TO THE UNIVERSITY OF ILLINOIS, FY 1976, BY GRANTING AGENCY (in thousands of dollars)

Agency	Amount of Research Expenditures to University
Department of Transportation	$ 486.2
Institute for Environmental Quality	442.4
Water Pollution and Water Resources Commission	442.4
Department of Conservation	361.5
Board of Education	300.5
Department of Corrections	212.1
Department of Public Health	192.8
Department of Mental Health	110.6
Department of Agriculture	99.4
Department of Aging	90.2
Department of Public Aid	39.5
State library	29.7
Department of Local Government Affairs	23.9
Department of Business and Economic Development	23.1
Illinois Law Enforcement Commission	22.0
Illinois Environment Protection Agency	12.9
Department of Law Enforcement	10.7
Board of Higher Education	10.1
Illinois Arts Council	9.5
Legislative Council	5.1
Racing Board	4.8
Illinois Energy Resources Commission	4.8
Northeastern Illinois Planning Commission	2.7
Illinois Commission on Intergovernmental Cooperation	1.1
Secretary of State	.4
School Problems Commission	.3
Illinois Archeology Survey	.2
Department of Labor	.2
Total, All Agencies	$2,939.1

Source: Based on figures from Paul E. Lingenfelter, "Study of State-Supported Research," Draft report to the Illinois Board of Higher Education, October 3, 1977. Springfield, Illinois. Mimeo.

a result of personal contacts and prior acquaintance with state agency personnel. For example, one university unit has established relationships through service by faculty on state advisory commissions. Another approach adopted by some units is to initiate linkages through telephone contacts and expressions of interest in agency mission. Once discussion of agency problems has been opened up, and the expertise of faculty demonstrated, contractual arrangements for research often follow. When compared with federal agencies, the system of soliciting, screening, and awarding state contracts may be seen as much more informal and variable between agencies.

TABLE IV. STATE AGENCY EXPENDITURES ON RESEARCH GRANTS AND CONTRACTS TO THE UNIVERSITY OF ILLINOIS, FY 1976, BY AGENCY PURPOSE OR FUNCTION (in thousands of dollars)

Agency Purpose or Function	Amount of Research Dollars	Expenditures to University (% of Total*)
I. ENERGY AND ENVIRONMENT (Institute for Environ. Quality; Water Pollution and Water Res. Commn; Dept. of Conser.; Ill. Energy Res. Comm.; Ill. Envir. Protection Agency)	$1,264.0	43%
II. HEALTH, EDUCATION, AND WELFARE (Dept. of Pub. Health; Dept. of Mental Health; Dept. on Aging; Dept. of Public Aid; Board of Education; Board of Higher Education; School Problems Commission)	773.7	26
III. COMMERCE AND TRANSPORTATION (Dept. of Transp.; Dept. of Bus. and Econ. Dev.; Dept. of Labor	509.5	17
IV. LAW ENFORCEMENT AND PUBLIC SAFETY (Dept. of Corrections; Dept. of Law Enforcement; Ill. Law Enforcement Comm.)	244.8	8
V. AGRICULTURE (Dept. of Agriculture)	99.4	3
VI. PUBLIC FINANCE, PLANNING, AND INTERGOVERNMENTAL RELATIONS (Dept. of Local Gov't. Affairs; Legis. Council; Ill. Comm on Inter-Gov Coop.; N.E. Ill. Planning Comm.)	32.8	1
VII. OTHER (Ill. Arch. Sur.; Sec. of State; Racing Bd.; Ill. Arts Council)	14.9	.5
Total	$2,939.1	

* Figures do not add to 100 percent due to rounding

The characteristic situation with many state agencies is that most work is done in-house or by private consulting firms, which have a staff "on-the-ready." Universities, therefore, receive a relatively small share of research allocations. This, in turn, means that negotiations are more likely to take on a case-by-case character — particularly because state programs may use different sources to finance projects. According to one study, the Request for Proposal mechanism plays a very minor role in the development of contractual relationships.

RATIONALE FOR UNIVERSITY–STATE COLLABORATION IN RESEARCH

Faculty who have engaged in research involving state agencies advance several arguments to justify further work with state government. First, the university possesses the technology and skills for analysis of technical problems which often are not available in-house at the state level. For example, the computer resources and laboratory equipment maintained by the university are superior for some purposes to any other facility in the country. Faculty in the hard sciences are most likely to emphasize this argument.

Second, the university receives its funding from the General Assembly and is therefore accountable to the people of Illinois. The output of the university should be responsive to the social and economic needs of persons who pay for the university system. Not all productivity of the university need be evaluated against the yardstick of state priorities and short-term, practical problems of Illinois citizens — but the university *is* responsible at some politically determined level for making a recognizable contribution to the welfare of state residents.

Third, the university can secure improved political sanction and a more adequate level of funding through conduct of research which is valued by members of the General Assembly and executive agencies of the state.

Fourth, work with state agencies will make more relevant the focus of university problem-solving activity in relation to contemporary and emergent societal issues.

CHARACTERISTIC OUTCOMES OF UNIVERSITY–STATE COLLABORATION IN RESEARCH

Most principal investigators express considerable satisfaction with the outcomes of state-sponsored research. In the hard sciences particularly, where project deliverables, analytic procedures, and sampling techniques are well-defined, project directors feel they have had little difficulty in meeting state expectations. Examples of several long-standing, positive arrangements between state and university may be found.

In the basic and applied social sciences, however, the success of state-supported research appears to vary directly with the political sensitivity of issues addressed. State agencies tend not to invite university research on delicate or explosive questions which may lead to loss of bureaucratic power, political embarrassment, or reduction in resources allocated by the legislature. Thus, while many agencies enjoy the status of having a university research team working on "significant" questions, the questions are carefully chosen. For example, research on new approaches to treatment of alcoholism may receive considerable support, while an examination of bureaucratic decision making and communication in a decentralizing agency may be exquisitely

side-stepped. The large and long-established state agencies are adept in concealing information which may be potentially threatening to the organization.

The most serious conflicts between faculty and state have apparently arisen over the issue of how project data are to be used. Because there is no clear policy between state and university regarding ownership and use of work completed under state sponsorship, principal investigators wishing to publish *all* findings — not just those which place the agency in a favorable light — find themselves under immediate fire by agency leadership. An inherent tension exists between the researcher's obligation to analyze and criticize, and the bureaucrat's need to retain control and stability in the organization. In seeking to mitigate this tension, faculty may be reduced to work on intellectually uninteresting questions or, in effect, running an "agency shop" where problems to be explored are defined by state sponsors and few or no publications result of value to the academic community.

An additional constraint affects the character and outcome of state-sponsored research. To a far greater degree than many federal programs, state agencies are mission-oriented. The need for immediate application of research findings is particularly acute; their time horizon tends to be extremely short — six to nine months, as a rule. The insistence of state agencies on results which can be clearly seen means that project outputs must be concrete and well-related to the frame of reference of the sponsoring organization. For faculty accustomed to a more leisurely and traditional approach to research, agency demands for research applicability to problems at hand sometimes seems jarring and unreasonable.

ADMINISTRATION OF STATE-SPONSORED RESEARCH PROJECTS

While many faculty have expressed satisfaction at the outcome of state/university research projects, a number of difficulties frequently surface in grant administration. State agencies are more apt to behave like watchdogs in the grant monitoring process, exercising more oversight than typical Washington sponsors. At the same time, aside from a few large state departments, most Illinois agencies have not had much experience in screening university proposals, selecting academic contractors, or monitoring research in progress. Agencies in an expansion phase, with the most available research funds, are sometimes the least apt to have staff on board who can prepare good Requests for Proposals and who are familiar with research review procedures. Bureaucratic turnover is frequently high, with the result that a faculty project director may have as many as three project monitors (or more) in the course of a single year. Each monitor interprets agency policy differently; none is familiar with the goals of the research. At worst, the costs of project administration under these circumstances can be very high.

Experience in contracting with one state agency does not prepare the faculty member for work with others. There is no uniformity in requirements for budgeting and reporting between state agencies, even on such fundamental points as use and ownership of research products, policies on line item over-runs, permission for out-of-state travel, notice of grant award, reimbursement of consultants, and conditions for purchase of equipment. The margin for error by faculty project administrators is, therefore, rather large. Furthermore, because of the relatively small volume of state-sponsored research in most departments, secretarial and bookkeeping staff are often unfamiliar with forms and procedures required by individual agencies.

In short, the same informality and variability typical of the grants negotiation process may also be found in the approach by state programs to grants management. While the flexibility of this system has advantages for those faculty sufficiently swift of foot and fleet of mind, the latitude for confusion and costly administrative snafus is a sobering consideration.

Research projects plagued most acutely by administrative complexities are those funded by state agencies using federal "flow through" funds. These funds cannot be shown as a form of cost-sharing on other grants for related federally-supported research. Even though the project is sponsored by a state agency, the Contracts Office of the University regards the funds as federal in origin — and expects an indirect cost rate for federally-sponsored projects to be paid. This rate is substantially higher than the indirect overhead charged to projects supported wholly by state revenues. The faculty project director must therefore secure, on a case-by-case basis, permission for exemption from the usual indirect overhead rate charged to federal projects.

Further, in project administration, the principal investigator must often respond to regulations and accounting procedures which meet *both* federal and state expectations. Obtaining clearance from university legal counsel under these circumstances may pose another time-consuming delay.

STATE-SPONSORED RESEARCH AND INDIRECT OVERHEAD CHARGES

One important source of funds to sustain on-going research at the university is indirect cost charges on externally-sponsored contracts and grants. Table V shows the percentage of total sponsored expenditures for research received for indirect costs from federal, state, and private contractors. It should be noted that the state share is noticeably smaller than federal or private sectors. Sharp debate has been waged over the matter of whether state contractors should pay indirect overhead charges to the university, another state agency.

From a faculty perspective, the issue places potential researchers in an awkward position. The reluctance of state agencies to meet university indirect overhead charges means that the attractiveness of faculty bids vis-à-vis

TABLE V. PERCENT OF TOTAL SPONSORED EXPENDITURES FOR RESEARCH RECEIVED FOR INDIRECT COSTS, ALL ILLINOIS PUBLIC UNIVERSITIES, FY 1975-1977

Sponsor	FY 1975	FY 1976	FY 1977
Federal Agencies	25.0%	26.2%	26.5%
State Agencies	5.2	6.1	6.8
Private Sources	10.3	11.0	11.5
Weighted Average	22.5	23.2	23.5

Source: Based on figures from Paul E. Lingenfelter. "Study of State-Supported Research," Draft Report to the Illinois Board of Higher Education, October 3, 1977. Springfield, Illinois. Mimeo.

other potential contractors is reduced. Equally important, unit administrators within the university are unenthusiastic about contracts which fail to compensate the unit for costs incurred by outside contracts. The faculty member who is able to attract a federal grant which pays the full indirect overhead cost rate gains more status than another faculty member who negotiates a state contract with little or no indirect overhead compensation. As long as this discrepancy exists, the incentive to seek federal sponsors will always be substantially greater than the motivation to locate new state sponsors for research.

MODES OF UNIVERSITY–STATE SPONSORED COLLABORATION ON RESEARCH PLANNING, IMPLEMENTATION, AND UTILIZATION

There are several research patterns that may be used to study problems of public policy. In the traditional pattern, the university defines a problem or area for investigation, based on expert assessment of needs for new knowledge. The proposed research is presented for funding to an appropriate external sponsor, and if the application is successful, faculty then obtain data based on the principal investigator's judgment as to the most appropriate research strategy. A report is prepared by research staff and submitted at the end of the grant period. The main feature of this approach is *unilateral* problem definition, research design, and product output with initial review by the contracting agency. Some perfunctory monthly or quarterly reporting on progress is also required by almost all sponsors. In this pattern, the amount of real interaction over research issues between principal investigator and agency is relatively minimal.

The basic limitation of this pattern is that research questions may have high academic significance, but little meaning to sponsoring agencies. Findings may be presented in a format which is unintelligible to agency users. Agencies may carefully avoid research on issues which are politically sensitive, while enjoying the ambiance and status of "basic research" on problems or

target populations within their province. The result is low utilization of research results, minimal contribution by the university to organization change or policy development, and failure to open up significant new areas of understanding related to fundamental problems in modern life. Such negative outcomes are more likely in basic and applied social science research.

A second pattern may be observed in the case of several long-standing contracts which the university has maintained with a few state agencies. These contracts involve data-gathering on scientific or technological problems and were initiated at a time when state staff were not qualified to perform needed data analyses. At the time research needs first emerged for these state agencies, most employees were Urbana graduates and naturally turned to the university for technical assistance. In effect, the university is serving as an "agency shop" in these contracts, functioning as a research and training arm of state programs. The university generates data; the state implements findings and acts as arbiter on policy implications, if any. While this second pattern has been most characteristic of certain contracts in the hard sciences, a few of the applied social science units have recently undertaken similar projects.

The shortcoming of this second pattern is that it typically does not result in scholarly publications, nor does it generate intellectually interesting questions. This approach has the least potential for meeting a major mission of the university — the expansion of new knowledge. It does increase the political sanction and acceptability of the university in state circles, because research questions have high immediate relevance to state agency problems. The amount of basic research conducted under the second pattern tends to be negligible.

Both state agencies and the university have, to some extent, moved away from these two extremes of unilaterally determined research projects. More genuinely collaborative modes seem to be evolving, which include the joint definition of problems or policies to be investigated; open — and even "town meeting" — reviews of research progress; negotiation of alternative formats for research reports, which have more flexibility in use by various potential consumers; and bargaining over the forms that utilization may take.

A special difficulty exists for faculty in the applied and basic social sciences. Serious disagreements may arise between agency and university over research *methodology*, given the small samples, politically sensitive data sources, problems of providing for control or comparison groups, and other factors affecting reliability or validity of observations.

Because the expertise in state agencies is growing, a few contractors have attempted to play an active role in choice of data-gathering method and sampling frame. In one or two projects, research data are being jointly

analyzed by state and university staff. Where agreements of this nature have not been made, some faculty have secured state agency contracts only to discover that the funding agency will not release data or authorize collection of information needed to carry out the study.

ISSUES FOR DISCUSSION

— Should university researchers doing contract research for the state of Illinois be allowed to publish their results without review by state personnel?

In the past there have been instances where state personnel have tried to suppress the results of state supported research activities. The reason for this was that the state agency and/or the governor might have been embarrassed by the publication of the results.

— How does the research investigator and/or the university deal with political sanctions over politically-sensitive research results?

Because both the executive and legislative branch have control over state resources, universities are always in a position of being sanctioned when researchers have published results which are unflattering to the political party in power.

— Should the executive and the legislative branches of government support research projects?

In the past, the primary sponsor for university research has resided in the executive branch of government. This is because the responsibility for environment, transportation, public health, and welfare all reside with units in the executive branch. Is it desirable to encourage the legislative branch of government to begin to support university research?

— Can university researchers afford to do research which does not result in scholarly publications?

University research projects usually result in material that can be published in scholarly journals. Most of the state-supported research activities, however, are not of the type that would result in scholarly publications.

— Should the University of Illinois recommend to the state agencies that they adopt a solicitation and renewal procedure which is modelled after the federal government?

The current review procedure for most university-based projects being funded by state agencies is extremely variable.

— Should the University of Illinois enter into an agreement with the state of Illinois that would set one indirect cost rate for all projects sponsored by state agencies?

Currently the faculty person often has to negotiate the indirect cost rate that will be applied to a research contract. This leads to strained relations between the researcher and personnel in the state agencies who are sponsoring the research.

— Should a clearinghouse for sponsored research be established in the state of Illinois?

This clearinghouse would act as a conduit through which monies would be channeled from the agencies to the university researchers. In addition, this office would standardize application procedures, criteria for evaluation, and would be the recipient for all formal proposals submitted by the universities in the state of Illinois.

— Should the normal budget period of research grants be lengthened to three years?

A current trend in state-supported research is for one-year awards. These short budget periods place unnecessary heavy burdens on both the investigators and the sponsoring agency by increasing the frequency of proposal preparation and review.

— Should the state provide a step funding mechanism to allow for orderly phasing out of research?

Because of the delays in the appropriation process, decisions to fund ongoing research are sometimes sudden, with adverse consequences for personnel and research resources. A built-in period for phasing out a project would probably increase the quality of the research product, reduce the disruptions that the cancelling of a project cause and would promote better relations between the researchers and the agency personnel.

— Is it desirable to remove budget category restrictions so that investigators may rebudget among all direct-cost categories?

The current procedure for rebudgeting among categories is cumbersome and time-consuming both for the researcher and for the project officer in the state agency. By allowing money to be rebudgeted among categories, it is expected that the researcher will be more responsive to the state agency's needs.

— Should grant numbers be continued for renewal awards?

The state should continue to use the same grant number for renewal awards as long as the overall research focus is the same. Changes in grant numbers promote unnecessary paperwork both for the investigator and the state agency.

— Can the project period be different from the budget period?

The entire report ought not be due until six months after the expiration date of the grant. This will allow for a more thoughtful analysis of the data and the preparation of a much higher quality report. In addition, this will give the state agency time to review the draft, convey comments to the investigator, and receive a higher quality document that is more responsive to their needs.

STATE-UNIVERSITY RESEARCH COOPERATION: A POLITICAL COMMITMENT?

Noel G. Ebrahim

I have been asked to comment on how the research needs of the executive branch of state government can be met by our state's universities. This assignment presupposes that state research needs exist, and that state government possesses the capacity to define them. For the purpose of this conference, the first assumption may be taken as axiom. Regarding the second, however, with great frustration I must submit that there is *no* single person or office in Illinois state government cognizant of the executive branch's total research agenda. State agencies remain ignorant of each other's research projects. Though pockets of awareness exist, for example in the environmental areas, in general no one is charged with the duties of surveying agency needs and developing trans-agency research priorities.

With this *caveat* in mind, I would like to share with you some thoughts on state/university research relations. I recently participated in the State Science Engineering and Technology Program (SSET), which is a National Science Foundation study of the scientific and technological needs of the Illinois executive branch. The SSET task force examined the research needs and capacities of executive agencies requiring scientific information on short-term and long-term time schedules. The question posed by the SSET project parallels the objectives of this conference: How can the governor utilize the research capabilities of the state so as to obtain the best information possible before making public policy?

SSET PROGRAM

The SSET program examined ways in which science and technology could be more effectively integrated into the gubernatorial decision-making process. To limit the program's focus, the definition of science was restricted to that type of knowledge generic to the natural sciences. A major project objective was to quantify and qualify state government's need for better scientific knowledge. The program evaluated both the demand for better scientific information in state agencies and the supply of information which agencies generate.

The governor is forced to deal on a daily basis with multifaceted cross-cutting issues, so his need for quality information is great. The governor's immediate staff plays a major role in filtering information from state agencies, but often even their sanitized data is tempered by agency bias and territorial imperative. Occasionally the governor does receive bad information, invalid data, or subjective agency opinion but, contrary to public belief, the governor tries to get the best information available; he cannot always get it.

To examine how scientific and technological information can be more effectively integrated into the gubernatorial decision-making process, Governor Thompson appointed a Task Force on Science and Technology which included representatives of public and private universities, a federal laboratory, a technical society, and both legislative and executive branch employees.

The SSET program was to design ways in which *better* information could get to the governor in order to strengthen the decision-making process. Before we could evaluate the quality of information which percolates up through the various state agencies, we interviewed those agencies with identifiable ongoing research needs. The agencies surveyed included: Agriculture, Conservation, Environmental Protection, Environmental Quality, Pollution Control, Public Health, Registration and Education, and Transportation.

As a result of these interviews, issues surfaced which can be classified as science and technology research needs. A fairly representative sample of issues which have scientific components indicate the diversity of executive branch research priorities. These include:

- The legalization of Laetrile;
- The issue of hazardous waste storage and transportation in Illinois, including the storage of radioactive waste;
- The standards for the discharge of sulfur dioxide into the air by power plants;
- The procedures for siting energy facilities, including power plants and surface mines;
- The use of the $70 million available through the Coal Development Bond Act;
- The use of generic drugs in filling prescriptions;
- The encephalitis outbreak of 1977;
- The health effects of different types of radiation, including x-ray, microwave, and ionizing radiation;
- The promotion of energy conservation techniques such as the use of gasohol and solar energy;
- Research involving recombitant DNA molecules;
- Concern for the potential invasion of privacy as a result of electronic data storage and processing of information;

— The implications of the use of extraordinary means in caring for the terminally ill; and
— The presence of polychlorinated biphenyls (PCBs) in the state's waters.

Although these issues represent a sample of the state's research needs, it was apparent from the agencies surveyed that not enough time could be spent on these issues; for agencies spend the majority of their time reacting to short-term, immediate questions. State government is a "responsive" mechanism and has not been programmed adequately to address long-term issues requiring scientific and technological research.

Because of its inability to anticipate problems before their occurrence, government has not had reason to tap the university's central strength, namely, long-term scientific, engineering and technological research. The paradox is evident: State agencies cannot utilize university resources to address long-range research needs when these agencies spend a disproportionate amount of time reacting to crises. This structural weakness was confirmed by agency personnel as the factor most inhibiting university/state research cooperation.

All agency officials agreed that the demand for better and more scientific and technological information is increasing and will continue to increase as more authority and responsibilities are assigned to these agencies for the protection and preservation of state resources. Nonetheless, state/university relations will not improve until state government develops a mechanism by which it can transfer research priorities more publicly. Furthermore, until state agencies are required to identify research needs and make priorities, their inability to *anticipate* problems before they occur will continue.

The state's apparent culpability in not publicly identifying its research needs on an annual and comprehensive basis has been responsible for underutilizing the resources available in our academic and scientific communities. To catalogue research needs for public consumption is too much work if your needs are being satisfied by contacts made in the "old boy" networks, or by private consultants who understand state government's time deadlines and bureaucratic parameters.

SSET Final Recommendations

The Governor's Science and Technology Task Force has just concluded its final recommendations and will be submitting its report to the governor by January 1, 1979. If implemented, these decisions could insure that better scientific analyses be provided to the governor and would create an environment essential to the improvement of state/university relations. The major recommendations include:

— The initiation of a formal and comprehensive approach to identify state research needs coordinated by the Bureau of the Budget, Office of Planning. Executive agencies would submit an annual list of research

priorities to BOB; BOB would serve as research "clearinghouse" for universities and consultants interested in identifying state research priorities.

— The employment of a "Chief of Staff" for the governor's Natural Resources Sub-Cabinet who would be a scientist by training, but familiar with university, federal and private sector resources; the sub-cabinet would be utilized by agencies as a forum to "manage" natural resources research agendas.

— The utilization of the Institute of Natural Resources as a center for academic exchange programs with state government. Professional scientists, doctoral students and university professors would work in the institute or for the governor's Natural Resources Sub-Cabinet to formulate executive public policy.

Full implementation of these recommendations would increase the probability of government/university research cooperation. State agencies institutionalizing an identification process within the Bureau of the Budget could provide universities with information about their research priorities. Exchange programs between the academic community and state government could be instrumental in improving communication between the two and in transcending attitudinal biases which have historically divided them.

Unquestionably, there are problems attached to the task force's recommendations. Bureaucratic imperatives must be overcome; questions of academic salaries and tenure must be resolved. State government needs to attract more qualified and concerned academics by developing working relationships which are sensitive to the paradigm of the scholar without surrendering the "mandate" of the public official.

THE INSTITUTE OF NATURAL RESOURCES

The state of Illinois has already taken a major step in the right direction, in at least one area, for establishing research priorities and making these known to the public. Through an executive order, Governor Thompson merged the Division of Energy in the Department of Business and Economic Development with the Institute of Environmental Quality. In the process of reviewing the executive order, the legislature moved to expand the new agency to include the Water, Geological and Natural History surveys (and the State Museum), and renamed it the Institute of Natural Resources (INR).

The institute centralizes for the first time all state-funded natural resources research. INR should provide improved coordination of research programs, which previously were spread among three state agencies. Natural resources policy issues will be developed in an agency with substantial research capabilities and the authority to implement those decisions. INR, when fully oper-

ative, will centralize functions, data collection, and information flow for the natural resources area. Universities and state agencies will have gained a potent research instrument capable of establishing policy and research agendas.

STATE–UNIVERSITY RELATIONS

Historically, the relationship between our public universities and Illinois state government could be described as a romance built on expedience rather than trust. This "conventional" dynamic has precipitated a tension which is neither unique nor pernicious. The relationship has the potential to develop closer working arrangements for the benefit of the state if the two sectors realized that, although they have different functions, both work for the *same* public; both attempt to improve the public health of the state. This similarity of purpose can drive government and the university into a reciprocal partnership if the basic integrity of each institution is preserved.

In a letter to the Illinois Board of Higher Education dated July 6, 1977, Governor Thompson expressed the desire for "increased utilization of the talents and applied knowledge of men and women in higher education on behalf of the problems and challenges facing state and local government in Illinois." Implicit in this request to strengthen the *links* between government and higher education was the suggestion that university scholars and scientists become increasingly aware of Illinois needs.

During FY 76, over $174 million was spent by the state for university research. Public institutions allocated $41.6 million in "unrestricted" state appropriations to various research activities. If state agencies could publicize their research priorities annually, it is reasonable to expect that universities would become interested in these state priorities. Cross-fertilization is more than possible if a balance is struck between the needs of the academic and those of the bureaucrat.

The reason state agencies utilize the service of private consultants to a greater extent than universities is threefold: 1) academics operate under different time constraints; 2) academics do not appreciate bureaucratic constraints; and 3) agencies do not know *what* resources are available and *where* to get that information. State contracts which do exist with universities are usually the outgrowth of personal relationships and proven track records.

Although the premise of this conference is to explore "possible" strengthening of state/university ties, one should not dismiss lightly or underestimate the success of already existing linkages between the two sectors. In addition to a myriad of contacts which facilitate the "old person" network, many formal mechanisms exist which transfer information, satisfy research needs,

or perform "think-tank" roles. A sample of these university-based mechanisms include:

Environmental Health Center (U of I)
Energy Resource Commission (U of I)
Water Resources Center (U of I)
Agricultural Extension Service (U of I)
Water, Natural History, Geological Surveys (U of I)
Institute of Government and Public Affairs (U of I)
Center for Policy Studies (SSU)
Legislative Studies Center (SSU)
Institute for Environmental Studies (U of I)
Highway Traffic Safety Center (SIU)
Wildlife Research Laboratory (SIU)
Coal Research Laboratory (SIU)

This impressive list of existing state/university research and policy institutes represents a historical attempt to tap the "intellectual and technical resources of our state." The numerous informal relationships and contacts which spin off from these more formalistic mechanisms are the central strength of this cooperative "marriage."

The academic community's traditional tendency to eschew politics and state government is the primary obstacle impeding the academic's accessibility to the political arena. Although few academic researchers have the time and inclination to "access the system," inroads to formalizing state/university relations cannot occur until a commitment is made to clarify for the governor, the General Assembly, and the state agencies what technical resources exist and are available to public officials.

CONCLUSION

Before the state and its universities can formalize cooperative research energies, an environment conducive to meaningful interaction must be established. Impediments to this relationship are grounded in territorial imperative; the integrity of each institution must be neither violated nor compromised.

The barriers of the past need not proscribe the action of the future. The university mission of thinking and learning can be maintained in the process of assisting in the research needs of the state. History teaches us that working relationships are possible, have prospered, and can grow if the operational parameters of the scholar and public official are respected.

The promise of state/university relations vis-à-vis research is in final retrospect the promise of politics itself. Without an interest or a willingness to take a chance and seek the possible, new programs and attitudes can never be actualized. The promise of politics as expressed through public policy, is based as much on chance as becoming a "player."

UNIVERSITY–STATE LEGISLATURE INTERACTION

John W. Ahlen

This paper discusses existing and potential linkages between universities and state government. Its perspective is that of legislative science staff.

Such a perspective was unheard of before 1969 when the California Assembly created the Assembly Science and Technology Advisory Council. The New York Assembly formed a scientific staff in 1972, and the Illinois General Assembly was the third state legislature to make use of a science staff through its Legislative Council, in 1973. Since then, science staffs have been attached to a growing number of state legislatures. The National Science Foundation has played a central role in the development of legislative science staff and has encouraged using different models to take advantage of the strengths in different states. Some of these models will be discussed later in this paper.

The significance of this legislative science staff perspective is that it is relatively new to the legislative scene and that it has observed something rather unique. The newness is important because perceptions are fresh and are biased differently than those of the more traditional observers of legislative activities. Thus, more significance might be attached to conditions that others might be taking for granted. The unique thing that has been observed by science staff has been the science staff itself. While some observers were interested in the contributions that science staff could make, that is, in the products produced, the science staffs were busy trying to develop procedures, information, and channels of communication that would aid them in finding and permanently establishing their place in the legislative branch of state government. Among the sources that legislative science staff might examine for proven procedures, and for information and ideas, and with which they might try to establish communication linkages, were the physical science and engineering departments in the universities.

Before discussing the existing and potential relationships between legislative science staff and the universities, it is important to note that any lessons learned from these specific relationships have broad applicability beyond science and technology. Experiences in Illinois and Wisconsin illustrate that scientific personnel can be fully integrated with legal and policy research personnel on legislative staff and show that the lessons learned by one can be used by the others.

THE ILLINOIS SITUATION

There are many relationships between universities and Illinois state government. This paper considers primarily relationships with the legislature.

The legislature is served by numerous commissions, each with a different major concern. All legislative commissions will have legislators as members; some will have public (nonlegislator) members as well. On commissions that have scientific and technical interests, it is not unusual to find public members whose expertise is valuable to the commission and whose full-time positions are with universities. This is true of both the Energy Resources Commission and the Water Resources Commission, for instance.

Commissions also might cooperate with universities on research projects of mutual interest. The Commission on Intergovernmental Cooperation is engaged in a project funded by the National Science Foundation and in cooperation with the University of Illinois' Center for Advanced Study. The goal of this project is to apply the computer power of the PLATO system to the support of legislative activities.

The Energy Resources Commission has contracted with the Legislative Studies Center at Sangamon State University for support in energy policy analysis.

The Legislative Council, a commission-like service agency of the General Assembly, has had a variety of interaction with universities in the state. Occasionally the interaction is a brief telephone contact as a direct result of specific research and information gathering assignments given to the council staff by legislators. It has been noticed by the council science staff that university personnel have not been used frequently. The low frequency is probably due more to the nature of the assignments and to the specific kind of information required than to any problem with communication between the science staff and university faculty.

In 1973 and 1974, the council experimented with contracted studies on issues of potential interest to the legislature. The study areas included drug abuse, energy resources, and medical technology. The contracts went to either universities or individual faculty members. The reports received by the council were of mixed usefulness. Some required very little editorial work before being published. Those dealing with energy were in great demand. Other reports required more editorial work and were of little informational value to legislative staff. Two were never printed.

While no formal evaluation of the contracted studies was performed, some conclusions about them seem obvious:

— The kind of information needed to formulate legislative policy is different from that needed to carry out policy; the former being broad in

scope (and unlike the contracted studies), the latter being more detailed.

— Given fixed and limited resources and a mission to serve the legislature's information needs, it is more productive to address issues of known interest of the legislature than to attempt to anticipate them and contract for reports on anticipated issues, as was done with the contracted studies.

— It is sometimes easier to prepare a report from scratch than to try and edit someone else's.

Other activities based on cooperation between the Legislative Council and a state university involved presenting seminars for legislators and legislative staff. Two such seminars were held.

The first, Atomic Energy in Illinois, Benefits and Risks, was developed by Sangamon State University for the Illinois Atomic Energy Commission, with the assistance of the Legislative Council and the Chicago Chapter of the American Nuclear Society. It was held in 1974.

The Energy Policy and Technology Seminar was presented the following year. It was the result of cooperative efforts between the Energy Resources Commission, the Legislative Council, and Sangamon State University.

These seminars gave faculty from Sangamon State, the University of Illinois, and Northwestern University the opportunity to share their expertise with legislators.

The proceedings of both seminars are valuable references. The relatively short papers summarizing the presentations are probably more useful to legislative staff than the contracted studies.

The Legislative Council hosted a University–Legislative Science Workshop in June 1974. Eight universities were represented. Participants were divided into four workshop groups, with each group considering one of the following topics:

— Access to Resources,
— Development of Resources,
— Identification of Resources, and
— Utilization of Resources.

The emphasis was on university resources that would be useful to the legislature, but legislative resources of potential use to the universities were considered, too. Numerous suggestions were made to improve the exchange of information between the university and legislative communities, including:

— Making the workshop participants the nucleus of an advisory board on academic science for the Legislative Council;

— Developing temporary task forces to assist the council on major interdisciplinary projects;
— Exchanging newsletters between the institutions and the council;
— Developing and establishing semi-academic centers at all universities;
— Developing fiscal and status rewards for faculty who assist the legislature; and
— Educating faculty and students to appreciate state needs and their importance, and encourage thesis or summer projects on state problems.

Two solid attempts have been made to involve academic people in Legislative research efforts by the council.

During the 80th General Assembly (1977-1978), the council's science staff was asked to assist the Illinois House Committee on Environment, Energy, and Natural Resources' Subcommittee on Recombinant DNA Research. The science staff prepared background information and helped to coordinate the subcommittee's public hearing which had been arranged by the subcommittee's chairman, Representative Daniel M. Pierce. Presentations were made by Citizens for a Better Environment, Abbott Laboratories, Northwestern University, the University of Chicago, and the University of Illinois. Normally, their involvement would have ceased at this point. It was arranged, however, for experts from these five institutions to have the opportunity to comment on a piece of draft legislation that had been prepared for the subcommittee. Comments were received from four of the five institutions, including all three universities. A bill (HB 3068) reflecting their recommendations was subsequently introduced by Representative Pierce in April 1978.

The other major effort, designed along the lines of the University–Legislative Science Workshop, focused on the deans of engineering in six university campuses in Illinois. (The campuses include Bradley University, the Illinois Institute of Technology, Northwestern University, Southern Illinois University, and the Chicago and Urbana campuses of the University of Illinois.) The deans, or their delegates, were invited to Springfield in February 1977, to discuss matters of mutual interest with Legislative Council staff. It developed that there was considerable interest in improving communication between the engineering schools and council science staff. Specific points of discussion included telephone contacts for quick and medium term inquiries from the council, exchange of directories, and exchange of newsletters or information to be included in newsletters. In the months following the meeting several inquiries regarding coal utilization were answered by engineering faculty.

A second meeting of engineering deans was held in April 1978. This meeting helped to maintain informal contact between council staff and the deans. Interactions since the first meeting were reviewed, and additional exchanges

were encouraged. In June, a memorandum was sent to the deans from the council's staff scientist asking for assistance on a project involving grain elevator safety. Four deans replied. A faculty member at Northwestern University contributed significantly to the project over a three-week period and continues to offer guidance to the science staff on this project. It is anticipated that he will review the technical elements of the council's report when it is completed.

Another kind of interaction is where personnel from a university spend time on legislative staff while on temporary leave from their institution, and conversely where legislative staff spend a leave with a university. From January through May 1976, the council had a faculty member from Sangamon State University working with its science staff on a day-to-day basis. The support for this activity was provided by the National Science Foundation.

The council's staff scientist spent six months, beginning in September 1978, on the faculty of the University of Illinois' Institute of Government and Public Affairs. During the temporary leave of absence from the council, the staff scientist worked on two major science and public policy projects for the institute.

The temporary transfer of personnel from legislative to academic staff, and vice versa, is an excellent way for strong linkages between the two communities to be established.

The interrelationships described here are not the only ones that exist between universities and the legislature in Illinois. There are many more. This author is aware of some of them, and realizes that there are others about which he has no knowledge.

Illinois SSET Projects

In 1977 the National Science Foundation began making awards under its State Science, Engineering and Technology (SSET) Program. This Program made available to all state legislatures and governors, funds to be used to plan new, and improve existing, scientific and technical inputs to state government policy formulation processes.

The executive branch project in Illinois is in its final phase and will be reported in some detail elsewhere in this volume by another author, Mr. Noel G. Ebrahim. The executive branch SSET project is of particular interest because one of its goals is to better bridge the gap between the universities and the executive branch of state government.

The legislative branch project has only recently gotten under way. It is somewhat different from the executive branch project in that the legislature is planning to improve an existing legislative SSET mechanism in the Legislative Council's science staff. It is too early to report on results from this

project, but one possibility is to propose development of a formal channel of communication between university scientists and engineers and the legislature.

OTHER STATES

Illinois can learn from other states' efforts to link their universities to state government. Some states have taken bold and unique steps to include university representatives in policy development. The following brief examples will give the reader a notion of some of them.

Colorado

The governor of Colorado takes advantage of multidisciplinary industrial and university expertise represented on his Science Advisory Council. The council is cochaired by persons from industry and higher education, and responds to expressed needs of the governor or his assistants. (Illinois has a statutory Science Advisory Council that is no longer functioning.)

Hawaii

The State of Hawaii draws heavily on its university for technical support. The Department of Planning and Economic Development uses university resources when developing its "targets of opportunity." Perhaps the most interesting link between the University of Hawaii and state government is the Governor's Marine Affairs Coordinator. The responsibility for planning and initial development in marine affairs is concentrated in the coordinator, who has the authority to expend roughly $800,000 per year in discretionary funds on promising marine projects. The linkage with the University of Hawaii is in the post of director, which is held by the university's Dean of Marine Programs.

Massachusetts

The Massachusetts legislature, through its Science Resource Network, uses journalism students on a part-time basis to answer legislative inquiries directed to the state library.

Pennsylvania

The Legislative Office of Research Liaison (LORL) is perhaps the country's best developed formal linkage between universities and a state legislature. LORL connects inquiries from the legislature with the resources in the six participating universities (Drexel University, Lincoln University, Pennsylvania State University, Temple University, University of Pennsylvania, and the University of Pittsburgh). Inquiries received by LORL are communicated to all six institutions, which have the option of either responding or not. Responses are returned to LORL where they are consolidated and condensed

into a one-page answer for the interested legislator. Thus consensus and diversity in responses are brought to the attention of the legislator. The length of the response cycle — from the legislator to LORL, to the institutions, back to LORL and then to the legislator — is two to four weeks.

LEGISLATORS

This paper would be incomplete if it did not mention the key personnel in any links to the legislature: the legislators. The characteristics of special relevance are the various roles that legislators assume and the kinds of information that they require.

There are two particularly prominent and often inseparable parts that a legislator assumes when elected: the roles of ombudsman for his constituents and participant in the law-making process. Where legislation is concerned, a legislator may assume these different roles:

- An author of bills,
- A member of a committee which must reach conclusions about and vote on bills,
- A proponent or opponent of bills being heard in committee or debated on the floor, and
- A vote caster.

In these roles, as well as others, a legislator has an enormous appetite for information, and needs it prepared according to different recipes. For example, the legislator may need information collected, explained, analyzed, evaluated, and verified. Furthermore, the information must be timely, understandable, concise, and balanced (or at least of well-defined bias).

SUMMARY

This paper reviews some of the ways that the legislature and universities interact. Those interactions might serve as a base from which broader participation might develop or they may contain a seed from which someone will cultivate a new and more productive state government–government–university partnership. These are the relationships, existing and potential, that this paper explores:

- University faculty as members of state commissions,
- Joint government–university research projects,
- Policy analysis by contract,
- Information gathering by contract,
- Information exchange by telephone,
- Cooperative seminars,
- Workshops to explore new relationships,

— An Advisory Board for Academic Science or Science Advisory Council for state government,
— Temporary university task forces to assist on major projects,
— Exchange of newsletters,
— Semi-academic university centers,
— Encourage involvement by faculty and students in public affairs and find ways to reward such activities,
— University comment on draft legislation,
— Critical review by university personnel of drafts of state reports,
— Temporary leaves of absence to be spent with a state agency (or university department),
— An official state function for a university faculty member, as in Hawaii,
— Activities for university students that assist the state, as in Massachusetts, and
— A formal university response service, as in Pennsylvania.

LESSONS FROM A BUREAUCRAT: OR, IF YOU WANT TO HELP ME, MIND MY MANDATE

Alexander M. Schmidt, M.D.

Author's Note to Conference Participants:

I was invited to present for your viewing a "bureaucratic perspective" of university-based policy research into health-related problems. After much consideration of alternatives, I've chosen to do as directed. But I warn you early on that successful* bureaucrats tend to be short-sighted, impatient, goal-directed, safely unimaginative souls, easily panicked. You may detect these traits in this paper; we bureaucrats write like we think!

All my bureaucratic service has been federal, in Washington, generally at a policy level. Yet, I have worked closely with federal and state bureaucrats who were working at the state level, and believe that what I will relate applies generally to state as well as federal government.

Because I believe that conference participants also ought to be goal directed and impatient, anxious to get something useful from this conference, I will try to be practical, if nothing else. This short paper, then, is not a theoretical discussion of university–state relations, or a comparative study of governance in two social institutions, or a catalogue of past and present university efforts to aid state government. Instead, it will try to tell a general audience how a bureaucrat in the health field thinks, and what he/she wants when feeling a bit panicky and turning to a university for help with a specific problem. The examples herein are based on personal experience, and any resemblance to actual persons and events is intentional.

THE HEALTH FIELD

The goal of government involvement in the health field at any level — federal, state or local — is to assure, to the extent feasible, high quality health care, including preventive care, for all citizens, at an affordable cost.

Quality, access, and cost: these three words have served as political rallying cries for the past half century. Quality of health care; access to "the

* Successful: to reach retirement age in service, having developed at least one new program.

health care system" for everyone, rich and poor, black and white; cost control — essentially every existing government program in the health field can be traced to an effort to assure one or another of these three laudable objectives. Professional Standards Review Organizations (PSRO)? — quality of care. Health Maintenance Organizations (HMO)? — access, cost. Regional Medical Programs (RMP)? Comprehensive Health Planning (CHP)? Health Systems Agencies (HSA)? — access, cost. Medicare, Medicaid? — access to, cost of health care.

Most government efforts in health care have been directed at assuring access to care for all citizens and paying or lowering their health-care costs. Quality of health care in the U.S. is generally assumed by bureaucrats already to be high — even too high;* and in any case, improving quality of care is considered of less importance than assuring current available levels of care for the large population groups not now receiving adequate care (estimated variously at 20 to 40 million people in the U.S., primarily the very old, the very young and the poor).

The above provides an opportunity to state the first general principle for the university scientist wishing to be of service to government —

Lesson #1: Bureaucrats think of populations, not individuals.

Bureaucrats' populations are usually very large and needy, described simply and simplistically in a word or two and with volumes of quantifying statistics. Thus, bureaucrats are concerned with the "poverty-stricken" (those with incomes below a certain level), with the "elderly" and the "young," with "minority groups" — all needy, and all counted in millions of persons.

Most university research in the health fields, however, is concerned with individuals or relatively small groups of people sharing certain characteristics; the desire of the investigator is to understand thoroughly those characteristics, and then to extrapolate. And so a bureaucrat given a legislative mandate to develop a program assuring that everyone in the nation with high blood pressure receives adequate treatment will not be enthusiastic upon being told by a professor that the mandate is inappropriate or impossible to carry out, nor will the bureaucrat be of a mind to appreciate an argument on behalf of research into the etiology of hypertension.

The bureaucratic mandate usually *is* to eradicate heart disease, or to find a cure for cancer, or to eliminate risk from food and drugs, or to eradicate crime in the streets of Illinois. Thus, the bureaucrat *must* think in terms of

* For instance, the Federal Trade Commission has recently laid siege to the plastic surgeons for restraint of trade, one complaint seemingly being that plastic surgeons' standards for training, board certification and even practice are too high and too rigidly controlled, thus restricting entry into the field — (access, cost!).

the whole population involved, and will not be able to consider bits and pieces, unless the whole is accounted for. Mandates generally are inclusive.

Which provides transition to —

Lesson #2: All bureaucrats have mandates, and take them seriously.

The bureaucrat's entre into the affairs of citizens is the political mandate, which derives from election results. If the election was won by a huge margin, then it is said the voters issued a mandate for the promised programs. If the election was close, the elected official has a mandate to prove his or her programs to be the correct ones. In either case, the president or the governor or the secretary or the director, often in a major speech, gives clear voice to the mandate, which immediately becomes of extreme importance to the bureaucrat.

Often, mandates are handed down by Congress or a legislature, through public laws. It then becomes the bureaucrat's legal obligation to carry out the mandate, under threat of penalty set by law for failure.

Government bureaucrats mandated to develop, for example, a nationwide or a statewide program to insure rational and comprehensive health-care planning, will insist on trying to do just that, sometimes to the surprise or consternation of almost everyone else, who would much prefer a more circumscribed effort. But, after all, the bureaucrat must deliver on the mandate, or be replaced. Therefore, it is not surprising that bureaucrats will tend to be unreceptive and perhaps even hostile to plans for policy research or other activities not directly related to their mandate. So, we come to —

Lesson #3: Bureaucrats support what *they* want done, not what *you* want to do, unless they are the same.

The academic, then, wishing to help government, must offer something to the bureaucrat that fits the bureaucratic mandate. The paradox of lesson #3 is that often, the government knows its mandate (to cure cancer, to prevent crime, to make food safe), but doesn't know precisely how to carry it out. If bureaucrats *knew* what to do, they would issue contracts to have it done, contracts being the most efficient, effective and economical mechanism for achievement available. But where government most needs help from universities is in the definition of programs capable of fulfilling a mandate. Unfortunately, this is often what universities resist doing, preferring instead, to offer substitute mandates, or suggest research only approximate to the bureaucrat's charge.

The solution is for the university to make a genuine and sincere effort to recognize the bureaucrat's mandate, consider the bureaucrat's goals, the large populations involved — indeed, the total sweep of the horizon, as it were — and then offer up research and demonstration programs consistent with and

conducive to the achievement of the mandate. To do otherwise invites failure, as can easily be illustrated by a recent government/university collaboration that failed miserably.

AN ILLUSTRATIVE PROGRAM FAILURE

In the early 1960s, the country was doing relatively well. Unemployment was down, revenues were up, government was growing in size and ambition, ready to take on new tasks. Basic necessities were plentiful, so attention could be turned to the fringe benefits of a rich society. The goal was a "Great Society," in Lyndon Johnson's words, and he and the 97th Congress set about to fashion it.

The major causes of death were identified as heart disease, cancer, and stroke. Medical science seemed to be working miracles and to be capable of reducing the toll taken by the "killer diseases."

The mandate to bureaucrats, then, became to make the miracles of modern medical science available to everyone: to bring the latest advances in medical science to the patient's bedside (quality of care) and to make the latest and best care available to everyone (access to care); cost was, at that time, of least concern.

The mandate as given was clear, but government wasn't certain how to accomplish it. The bureaucracy turned to university scientists and others to devise a program(s) to meet the mandate. The DeBakey Commission, headed by an eminent cardiovascular surgeon from Houston, Michael DeBakey, went to work and devised a program calling for a relatively few "Centers of Excellence" to be built for the care of patients with heart disease, cancer, and stroke. The centers were to be highly sophisticated institutes, associated with universities, conducting programs of clinical research and training, to which patients would be referred by practicing physicians (who, it must be assumed, would be delivering either old-fashioned or inferior care). Perhaps not surprising, the model for the centers was thought by most observers to be the institute being developed by Dr. DeBakey at Baylor University.

The DeBakey Commission recommendations didn't get far in Congress, nor were they supported by the executive branch, for several good reasons. Organized medicine throughout the country was offended and threatened by the idea of a few large referral centers caring for their patients. The American Medical Association lobbied effectively in Congress for a different program. Of greater importance, however, was the disregard shown by the DeBakey Commission for the original mandate. The mandate called for regionalization of health care, for taking health care to everyone's bedside, for getting the latest advances of medicine to all practicing physicians so they could better care for their patients. The DeBakey Commission proposed, instead, to take only the most difficult patients to university centers, at which

would be found a Dr. DeBakey. The difference was unacceptable to both Congress and the executive. Congress rejected DeBakey's recommendation for Centers of Excellence, but kept some of his program ideas, embodying them in Regional Medical Programs (RMP). These Regional Medical Programs were described in legislation as regional cooperative arrangements among health-care providers, the purpose being to plan local programs (generally on a state-wide basis) that would bring modern-day medicine to the nation's bedsides, via the practicing physicians of everyday life.

Again, government turned to universities for help with program design; and again, universities hungrily complied. By 1968, there was at least one RMP in every state, and several RMP's in populous states. All but a few were highly integrated with ("dominated by," in bureaucratese) universities. The programs early held promise of effecting great change for the better in our health-care system. Universities brought all segments of the health-care industry together for the first time in history, and universities were viewed as relatively uninvolved catalysts for needed change. But, as university "dominance" of the RMP's grew, program direction tilted toward the universities, and ultimately, universities ended by "blowing" the whole thing.

The fatal error, in the view of the bureaucracy, was that universities ignored the basic mandate, which, you will recall, was to improve health care of all people with heart disease, cancer, and stroke. Instead, universities concentrated on improving their own condition, or so it was said, spending millions of dollars to support their own faculty and programs, to renovate university space, to buy university equipment — all perhaps worthy and needed by universities, but not particularly relevant to the bureaucrats' charge.

Universities meanwhile were unwisely ignoring another legislated mandate, closely and obviously related to RMP, for regional (state-by-state) planning of health-care services and facilities, having substantial consumer involvement in that planning. Early in the history of RMP's, this companion legislation, known as the Comprehensive Health Planning Act (CHP), was largely ignored. But with the "failure" of RMP's to do their intended job, and given the universities' reluctance to modify their stance, government withdrew its support from RMP's and turned to CHP agencies for the mandated regional health planning. Universities, dependent on RMP funding, distrustful of and largely uninvolved in the consumer-dominated CHP agencies, left the field to fight a rear guard action to preserve RMP funding. But the RMP's collapsed and died; CHP agencies soon followed.

The unfortunate results of the failure of the original program for heart disease, cancer, and stroke are easily identified, and important. We now have an ill-conceived "war on cancer," a National Institute of Neurological Diseases, Blindness and Stroke, and a greatly enlarged National Heart and Lung

Institute, but no cohesive, comprehensive patient-care programs. RMP and CHP have been replaced by Health Systems Agencies (HSAs), again on a state-by-state basis, again consumer-controlled, but with legally constituted authority to approve and disapprove new health-care programs and facilities. This time universities haven't been asked to do much.

The bureaucratic view, perhaps overly cynical, of the failure of university/governmental cooperation in RMP/CHP was the universities' inattention to, or subversion of, the bureaucrats' mandate. In fact, all three of the above-discussed lessons were ignored: universities neglected the bureaucrats' large population needing improved health care; universities ignored the government's mandate and developed their own program goals; and universities did what *they* wanted, not what the bureaucrats needed. So it is not surprising that the programs failed; or that the bureaucracy is trying again, with a new cast of characters. This brings us to —

Lesson #4: Bureaucrats' mandates may be wrong, but they are valid.

As noted above, mandates come from Congress or legislatures, via law, or from presidents and governors, via executive order. Mandates can be changed or ignored by a bureaucrat only at his or her peril. Further, mandates are often like natural laws, empiric and self-evident. Little research is needed to back a mandate for access to health care for the poor. Policy research needs flow from a mandate, generally, not the other way around. This simple truth should not be ignored by universities wishing to help government.

And now, two final lessons, a matched pair —

Lesson #5: Mandates can be changed, but they hardly ever are.

Lesson #6: Bureaucrats come and go, but their mandates linger on.

Mandates are changed only by those who make them (e.g., Congress, presidents), and mandate-makers are reluctant to change directions and thus appear inconsistent. The federal mandate for consumer-dominated regional health-program and facilities planning has been around for at least eighteen years and five administrations. The mandate to develop a national health insurance program has been issued by at least the last half-dozen presidents, including President Carter. State-level mandates are even hardier, being generally of a less exotic, more practical variety. States must actually care for the poor, the mentally infirm, etc., and these programs change little from year to year.

SOME CONCLUDING THOUGHTS

With the above lessons firmly in mind, let us turn briefly to the specific topic of university-conducted policy research in the health field.

Universities are among the most worthy of social institutions; and what they are supposed to do, they do well. Universities, for example, do very well by students wishing to learn; and universities provide a superb setting in which investigators can satisfy their curiosities. But the urge for university scientists to engage directly in policy research of immediate and practical interest to state government is suspect on several counts.

Experience tells us that university research is generally open-ended, unfettered by the need to be immediately relevant to social problems, free to "follow crooked paths to unexpected conclusions."[1] University research is not and cannot be "political," in the sense of responding to or assisting narrow partisan interests. Also, university research is generally conducted by individuals or small groups within a single discipline (department), and therefore tends to be segmented and discontinuous. Successful multidisciplinary research, "program projects," and similar university efforts to cross disciplinary lines are rare and usually short-lived. Interdisciplinary groups of faculty with the skills and desire necessary for the type of policy research that is useful to governments are rarer still.

In contrast, government-conducted policy research is goal directed, if nothing else, and dedicated to furthering the interests of large populations as seen (perhaps with a biased eye) by the party in power. Such research requires many disciplines working at the same problem.

One argument holds that universities should "do their thing" as defined by faculty; if the knowledge gained by university research is coincidentally of use to government, then fine. Because university research *is* set by the interests of the faculty, however, the bureaucrat's mandate is often irrelevant to the research.

But, goes the counter-argument, universities have always played an important role in solving society's most severe problems, and universities should continue to do so. Certainly, governments need help — particularly with the exploration of alternative means of achieving a goal. For example, universal coverage of all citizens by some form of health insurance is a laudable mandate; but, how do we achieve it? What medical conditions will be covered? For how long? How will the program be administered? How evaluated? How financed? And so on.

Universities *are* repositories of useful knowledge and expertise, and *should* be of great value to the bureaucracy. Whether they are or not depends entirely on the university, and how faculty approach the task.

To the extent the university motive is to influence public policy or to

[1] Charles Frankel, Professor of Philosophy and Public Affairs, Columbia University, as quoted in *The New York Times*, July 2, 1978.

change the mandate to benefit universities, the effort will fail. To the extent the research agenda is not set by the bureaucratic mandate, the effort will fail.

Perhaps the best answer is the creation of one or more university-based multidisciplinary research groups, consisting of both faculty and bureaucrats working conjointly at problem solving, accepting the bureaucratic mandate as the legitimate end but exploring alternative means, sharing resources, knowledge, and skills.

In time, such a collaborative effort would undoubtedly influence the mandate-makers in the legislative and executive branches of government, and, in the process, foster a more congenial relationship between government and the academy.

In my view, an informal, unstructured, unplanned university effort to help government will not succeed. University faculty, like other people, generally do what they want to do; and not many university faculty, at least in medicine, have shown a desire for policy research. But a group could (and should) be gathered which *would* help the bureaucrat — on his or her terms — which, after all, are the only terms there are for government.

REPRISE

Lesson #
1. Bureaucrats think of populations, not individuals.
2. All bureaucrats have mandates, and take them seriously.
3. Bureaucrats support what *they* want done, not what *you* want to do, unless they are the same.
4. Bureaucrats' mandates may be wrong, but they are valid.
5. Mandates can be changed, but they hardly ever are.
6. Bureaucrats come and go, but their mandates linger on.

A BUREAUCRAT'S PERSPECTIVE OF STATE AND UNIVERSITY POLICY LINKAGES

Michael A. Belletire

Few managers in state government are provided with the opportunity to address members of the university community on subjects as dear to that community's heart as research. The challenge presented me is, of course, to muster the rigor of my earlier training and prepare for you a well-researched and properly footnoted paper which sets forth the necessary assumptions, draws for you a useful model and presents the empirical evidence which supports my thesis.

Sadly, however, I am not up to this challenge. Being tucked away in the bowels of bureaucracy for several years has provided me safe haven from the discipline of research. Thus, please expect little from this paper, save the biases, opinions, and intentionally provocative statements of one man. While hardly sound footing for consideration of future policy choices, I trust that my remarks can serve as a basis for injecting frankness, and some differing perspectives into the serious work of this faculty.

As a further disclaimer, it should be observed that the focus of my remarks is the human service side of government and research. Having dropped out of engineering school seems a sufficient basis for me to absolve myself from conclusions and observations about government programs and research needs in the physical, biological and engineering sciences.

With this literary license as background, and begging the reader's indulgence, we turn to discuss the subject at hand: the policy research needs of state government which suggest increased university or state government cooperation and involvement.

I propose to address my subject by avoiding a recitation of those emerging areas in government which seem ripe for long term policy study. This, frankly, would be boring and I suggest quite useless for I have no real sense of what type of research this particular group of faculty might find of interest. Rather I intend to communicate on three broad subjects: (a) a one-man statement on the "sociology of state government" with respect to the interface of research and decision makers; (b) a description of several types of mechanisms

that might be explored for linking university research and state governmental policy; and (c) reflections on academic research and governmental needs.

ON THE NATURE OF GOVERNMENTS AND BUREAUCRATS

If it is the desire of those undertaking research to identify ways to relate to the longer term policy research of state government, it seems appropriate to discuss initially some aspects of the nature of state government. I believe that John Maynard Keynes is quoted as having responded to a student's particularly vexing question about the "long run" by noting, "In the long run, we're all dead." As a bureaucratic corollary to this, I might suggest that for state government in the long run, there is no long run. State government with its bureaucrats, its politicians, its policy makers and its programs will, of course, endure. But today's policies, programs, bureaucrats and politicians are incredibly short term oriented. The long term in government is merely the sum of many short terms.

On this note, it seems unavoidable that I underscore the play on words related to the word "terms," for in my assessment it is the nature of governmental elections or terms that gives rise to the "short term" mentality of government.

A bit of empirical evidence: Since 1967, Illinois has had five governors. Since 1971, the Department of Public Aid has had five directors. Between 1970 and 1977, the Department of Children and Family Services has had, as I recall, seven directors. The Bureau of the Budget during the 1970s has had four permanent directors and at least two "acting" directors.

There are, of course, state departments with less turnover, but, in general, within the executive branch of Illinois government the tenure of department heads is short. This high turnover is not restricted to the executive branch of state government. Between this General Assembly and the previous one, all but one of the key leadership positions in both houses on both sides of the aisle changed, despite the fact that there has been virtually no change in the majority/minority party alignment. The staff of the General Assembly has similarly undergone dramatic changes of personnel in the past five years.

Obviously, much of this turnover is interactive with the changes in governors, particularly when a change in governor also represents a change in party. But the point should still be clear: How can one relate to the long term policy research needs of government, when the primary policy makers of government change so rapidly?

The argument can of course be made that long term policy needs and issues are separable at least in part from policy makers, a thesis to which I can ascribe. However, being able to relate or apply the results of policy research to government requires an interface of personalities at both the developmental and result stages. That is, for policy research to find application

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within government, the researcher must at a minimum begin and end with the involvement and cooperation of governmental policy makers. As these individuals change (and, to some extent, as there are changes in the roles various department heads play), the utility of research begun under a given set of actors and assumptions may well diminish.

There is a tautology here which deserves exploration. If policy makers behave as though there is a cohesive "long term," then perhaps they might develop the capabilities to "rise above" short-term mind sets and survive to realize a long term. I would argue strongly that many in government do in fact understand this phenomenon and march to this very tune. Sadly though, I would observe that such persons are not policy makers who initiate change or absorb research, but status quo bureaucrats who rise through the layers of an agency by insulating themselves from the external environment.

Those who reach the upper echelons of decision-making positions through this process have done so not by mastering long term policy perspectives, however, but by a mastery of the politics of the work place. As true policy makers change, the "status quo makers" are generally reshuffled and redealt to reasonably well paid positions of authority out of the line of fire.

It would be unfair to leave the impression that only agency directors can be seen as policy makers who might benefit from the research products of the university. Second and third echelon administrators do, in fact, bear a responsibility for adjusting the directions of an agency. Persons in these roles translate the directions of the chief executive and the agency head into operational terms. They must also absorb the messages coming "up the line" from the career workers who exist "where the rubber meets the road" e.g., those serving clients, processing tax returns, inspecting buildings or conducting licensing examinations.

The previously mentioned status quo makers in these positions tend to fulfill dutifully the wishes of higher level policy makers, but carefully screen the messages emanating from up the line, filtering out and filing those factors which translate into something which might relate to a broader need for change in the interests of the "long term."

But a second group of upper echelon staff also exist — those who were brought on board by the governor or the agency director. These individuals generally tend to function as decision makers. They are often placed in key positions and asked to address the most significant short-term problems facing an agency. These persons are generally the policy implementors most likely to rock the most and most ready to bring about change. They have little sympathy for the career bureaucrats, some disdain for the status quo makers, and generally want to "dance with them that brung 'em." These very qualities, however, generally relegate such policy makers to the same short-

term existence and mind set that grips "them that brung 'em." Some of these persons do bridge the gap of administrations, largely because of their knowledge base and their general managerial skills. But even those who do stay on tend to remain focused on resolving the "right now" problems of an agency. Such actors are likely to move on to be top policy makers in other governments, but their long term remains the sum of the several short terms.

Yet another group of actors within government might be seen as the most likely to desire and benefit from long-term policy research — "the planners." Every agency of any size within state government has at least one organizational unit which has as part of its official title some combination of the words "planning, development, research and evaluation."

Turnover among such staffs is generally not great, as I observe it. Persons entering positions in these units tend to have training at or above the Master's level and perceive themselves as professionals responsible for addressing the long-term policy needs of an agency. Are these not the perfect mates then for a university-government marriage? Before you rush to the altar be certain to consider the reputation of your intended and the results you can expect from this union.

If university researchers want a reinforcement of the importance of their rational models, conversations filled with familiar phrases and concepts, and reiteration of the macro-problems posed "in the literature," a linkage with state planners seems quite in order. Through such a marriage, university researchers can probably also be assured of isolating themselves from the decision makers in state government — a desired end for some, but perhaps not for everyone.

Don't be misled by my remarks, for the "planners" of state government play several important roles. They are a key cog in drafting the narratives of federal grant applications and as such are called upon to make certain that planners in Washington have their expectations fulfilled. They also have the responsibility of being in constant quest of the data base necessary to keep grant narratives and budget submissions respectable. And, perhaps most significantly, the planners of state government represent their respective agencies on the ever important and omnipresent inter-agency committees and advisory councils which discuss inter-agency coordination problems and the needs of various service target groups.

One of the more significant aspects of the influence (or lack thereof) of state planners is the relationship they have to the financial resources of state government. Except for assisting in the preparation of justification statements for documents which help secure appropriations or grants, planners have little to do with the decisions involved in committing resources to programs and services.

Financial resources are the glue of state government. Budget decisions and contract commitments are the best reflections of government policy. And, in a nutshell, such decisions are invariably based upon short-term constraints and perspectives. The policy makers of government respond not to the "investment" principles represented by planning, but to the "expenses" of government and the costs of meeting today's priorities.

There is little time for developing a long-term approach to welfare reform in Illinois when newspaper headlines scream for the "elimination" of welfare medical fraud. Budget decisions and resource commitments flow from these headlines. Next year's budget decisions may respond to abuses in the food stamp program or to some newly imposed federal regulation, but it is fair to conclude that the foresight does not exist now to project these "right now" priorities — even if there is no change in the departmental directorship over the coming year.

In concluding this sociological gambit, I might observe an ultimate irony: that one true long-term policy research need of state government is how to alter the nature of this cycle of short-term decisions to inject a long-term, investment-oriented, decision-making process within parts of government.

ON THE NATURE OF RELATIONSHIPS

I'm hopeful that the somewhat cynical views expressed in the previous section of this paper can serve to temper the enthusiasm some might have for placing high expectations upon the products of improved university research/state government linkages. I remain confident, however, that prospects for some limited improvement in relationships are bright, and turn now to discussing the mechanical side of structuring such relationships.

A series of approaches to structuring relationships seems possible, and a combination of approaches might prove desirable. Each approach has its advantages and disadvantages, and the several mechanisms discussed here should probably be judged against the limitations discussed in the previous section: the varying needs of different state agencies; the scope of research interests of the university community; and the perceived probabilities of seeing a particular approach gain implementation status.

Policy Institute: Perhaps the most obvious mechanism for linkage would be the creation within state government of a policy institute,[1] a governmental counterpart to the IGPA and similar institutes at various public and private universities.

Such an institute could be staffed with a broad base of personnel charged

[1] During the Ogilvie administration the state formulated such an organization known as the Institute for Social Policy. Roy Wehrle's contribution to the present volume is a sort of autopsy on the death of that institute.

with helping to read the "short-term" environment of government, and translating such signals into long-term policy research directions.

One danger of such a model, of course, is that state government would merely centralize within an institute the same "planner types" already a part of each agency, thus perpetuating the gap between planners and decision makers. A careful screening effort which brings personnel with prior policy-making responsibilities within state government into such an institute might serve to diminish, at least initially, this danger.

The most significant drawback to the institute approach, in my view, is the detachment such an entity would have from the resource decisions of state government. Unless the institute were located close to the governor (a decision which would also tend to make for a short-term oriented staff), the ability to influence broad-based budgetary choices would be minimal. Locating an institute staff with the Bureau of the Budget might enhance the prospects of budgetary influence, but would also tend to diminish the "investment" orientation of such a staff.

Training and Development: A chronic need of state government, particularly in the human service area, seems to be the need for training and staff development, particularly among the "client contact" staff of various agencies. Providing such staff with updated skills or imparting university level academic skills to those who may have risen through the "career ladder" ranks, represents not only an opportunity for the university to ply its primary trade, but in the process to measure research needs through contact with the front-line staff.

An offshoot of this approach is the cultivation of a strong internship program where current students interact with government and the university, seeking to help with both the direction of research and interpersonal relationships.

Perhaps the major shortcoming of this approach is the fact that it forces the university to develop a more difficult set of relationships with state government (educational) before research needs can be addressed.

The Great Exchange: Among top administrators in government and faculty in the university, few people are unfamiliar with the phrase that "those who can't do, teach." One approach to improved insights might be an attempt by the university to tackle this assertion head-on, through the development of a formal exchange program between the university and state government.

The idea, of course, is not new. Major eastern schools have cultivated this mutual exchange theory with some success with the federal government and in isolated circumstances with state governments.

Critical to the development of such an effort, however, are several factors: a willingness to assure that "placement" occurs for reasonable time periods; proper organizational placement of university personnel; and faculty willingness to allow "unlicensed" governmental policy makers to enter the world of the Ph.D.'s.

A note of caution: The focus of faculty placements in government must not be to do research, but rather to gain operational experience which, upon reentry to the academic environment, becomes a stimulus for policy research and a basis for the interpersonal contacts involved in such research.

Evaluation: Government programs are rarely given serious evaluative scrutiny, perhaps because most government programs (notably social programs), are of dubious value in terms of their impact upon people in need. I would suggest that academics trained in the discipline of a devotion to the advancement of knowledge are uniquely situated and skilled to help blow the whistle on things which aren't what they profess to be.

Evaluation of programs and services, of course, does take away from the glamour of "big picture" research and seriously diminishes publication potential. Even more importantly, program evaluation lends itself invariably to electoral politics, as the results of evaluations become the grist of the campaign mill.

The Legislative Connection: The focus of most of my remarks has been upon the executive branch of state government. The legislative branch, while far from being exempt from the type of criticism previously reserved for the bureaucracy, does offer an opportunity for the university/state research linkage we are considering.

The General Assembly currently has a number of commissions, the focus of which seems to be long-term government policy. Two such creations, the Intergovernmental Affairs Commission and the Economic and Fiscal Commission, have been quite active in the past five years studying human service and "governmental process" issues. Though not resulting in major policy changes in state government, the various studies by these commissions have resulted in new legislation and in appropriation bills or legislative oversight hearings.

There seems to be no reason why the university sector could not tie into the ongoing activities of some of these commissions, though care should be taken in selecting which issues deserve to be given consideration.

A Futures Colloquium: If one accepts as reasonably accurate the thesis set forth in this paper concerning the "short-term" orientation of state policy makers, it may be futile to expect to link long-term research with particular individuals or organizational units within state government. It is still possible,

however, to gather together current policy makers on a periodic basis and glean from them insights into the long-term issues they see facing state government. Though policy makers will change, well-structured conferences should at least provide researchers with adequate signals which can be utilized in setting useful directions. Application of this research would likely suffer, but an ongoing effort of this nature, coupled with periodic "feedback" conferences, could serve to enhance communications and in time lead to more structured and permanent relationships.

There are, of course, other approaches which deserve discussion. We have not mentioned, for instance, a strategy linking individual state government departments to specific individuals and/or departments within the university. Also, little consideration has been given to the needs of the university community and the practicality of these approaches. We have not addressed either the matter of financing long-term research, a subject which may actually preempt any useful discussion of other needs. However, I trust that the range of options presented above gives conferees adequate food for thought.

ON ACADEMIA AND STATE GOVERNMENT

Upon reflection, I would suggest that the generalizations I have offered thus far deserve further adjustment. First, my own experiences in state government have been restricted to the human service agencies of the state system and to experiences gained in jobs with only two executive branch agencies. In addition, in the interests of stimulating discussion, I have made little attempt to credit government with the capability of absorbing research, for if the task were easy this conference would seem unnecessary.

I have avoided thus far any serious observations based upon my perceptions of the *capabilities of the university community* to relate adequately to the research needs of government. Frankly, had I begun with this subject, I think my presentation would have been quite short. Fundamentally I believe the university community incapable of addressing the social service research needs of state government, not necessarily because of the narrowness of state government, but in part because of the incredibly limited "applied world" management experiences of many university faculty members, and the generally self-serving ends of the research game played within academia.

While state government can rely upon *individuals* from the university sector to provide useful guidance and direction, I see no direct linkage to policy research projects necessary to effect such aid. While my own views may seem extreme, I believe that this sentiment is fairly prevalent among other policy makers within government, such that at a minimum academia has an image problem to overcome if any strong linkages with state government are to be forged.

ON GETTING OUT OF ALL THIS ALIVE

Having taken broadsides at all that is holy within academia and government will leave me with few allies in either the university or government community. I have been, I trust, sufficiently provocative to allow the conferees to drive trucks over, through or around my assertions, leading, I hope, to more reasoned judgments "towards the mean" concerning the prospect of improved policy research linkages.

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A TRY AT RESEARCH: THE ILLINOIS INSTITUTE FOR SOCIAL POLICY

Roy Wehrle

> Compared to what once was expected, the age of analysis yielded a disappointing and . . . a bitter harvest.
>
> A. Schick

> The uses of analysis are most in demand when underutilized, slack resources are available, when there is a great deal of confidence in the efficacy of public action, and when policy makers want to forge new program initiatives.
>
> A. Schick

In the mid-1960s in Viet Nam, American offices were traversed by numerous memoranda describing what the U.S. should do to help South Viet Nam in its process of "nation building." The term reeked of presumption. By repeatedly using the term, deluded American officials came to believe they were involved in nation building. Policy analysis, over the years, has taken on the same misplaced mystique of being something it isn't, of having a magical content that can be poured over social problems to solve them.

In the late 1960s the state of Illinois made a significant effort to apply research and policy analysis to social policy. The Illinois Institute for Social Policy was created on July 1, 1969 and operated through June 1973. I was appointed the first director in May 1970 and served until July 1971. The institute had a research staff of about fifty persons located in Springfield and Chicago working in the areas of welfare, health and corrections. In addition, there were two large experimental projects. One was in the Woodlawn area of Chicago testing the new HEW policy that the same caseworker should no longer be responsible for both the income grants and the social services for a welfare recipient. The other large program, in Peoria, involved testing a new way for citizens to gain access to state social services. A person in need could go to a newly established state social services office and be assigned to the state agency which could best help him. Approximately 200 people worked for the two experimental programs. The expenditures by the institute during 1971 and 1972 were around $2 million per year.

I have been asked to consider the lessons of this institute in respect to future cooperative ventures in policy research between the University of Illinois and the state. To do this it is useful first to set forth an overview of

policy analysis, tell briefly the tale of the institute, and conclude with an assessment of why the institute failed and what lessons this failure may hold for future research.

GOVERNMENT ACTION AND POLICY ANALYSIS

Action by government may require research into one or all three of the following stages of policy development: choosing what is to be accomplished, deciding how best to accomplish it, and doing it. For purposes of this discussion, we will simply term these types I, II, III. Admittedly, ends, means and implementation can seldom be separated so neatly, but this classification highlights the different knowledge and skills required to carry out the three types of research.

Type I research — choosing the goals of research — involves framing the problem, choosing the questions to ask and determining what the problem is. A researcher cannot be effective unless he serves the needs of his boss, but the boss may disguise or be unable to state his true needs. It makes a big difference whether the request to "find ways to reduce welfare costs" means "without hurting people in need" or "so I will look good to the Proposition 13 folks." This is the innersanctum of policy analysis. Seldom are researchers present in the office when the boss and his staff discuss why they want to act in the welfare area. Rarely does the researcher know the gestalt or image (Boulding 1971) or appreciation (Vickers 1968) of the problem that the boss has. This makes it difficult for him to choose a policy objective suitable to the needs of his boss. Policy analysis of most public policy questions in Stage I requires exceedingly broad knowledge of society and government, as well as the empathetic skills to understand the problem as it is seen by the official requesting the research. Such research directed to "what then is the problem" is by far the most difficult policy research to carry out and requires the most skilled personnel.

Type II research — the means to carry out a policy — involves difficulties of a different sort. Here the operative question is, "how can we best do it?" If the criteria for "best" are specified or understood, and the task is well defined, then the search for the "best" means requires imagination coupled with knowledge of causation, or what Vickers (1968) calls reality and instrumental judgments. Given what is known about how the world works, what means will best achieve the most of wanted ends and give the least of unwanted ends? Scope and definition are crucial. If the task and criteria are not well defined, or are wrongly defined, then the researcher requires broader knowledge and greater powers of creativity and imagination to better define ends and criteria before analyzing means. In effect the researcher is pushed back into Type I research. In either case, this stage requires detailed knowledge of how government, society, and the economy function, including the

institutional and legal constraints on action, and what other states and governments are doing. It also requires conceptualizations of what is possible, and what alternative means might work. This stage of analysis can be very narrow, technical, and straightforward or it can be broad. This depends on the scope granted to or seized by the researcher as well as the nature of the problem.

Type III research — carrying it all out — requires much of the technical knowledge needed in the second stage because choosing the means to accomplish something necessarily requires an understanding of how the means are to be used. This stage is primarily viewed in management terms: how can the means selected best be employed to achieve the desired ends. Imagination is as critical as in the two previous stages, but is focused on organizational and psychological means to encourage personnel to use their talents and energies to their fullest extent in achieving the desired goals.

Thus one way of looking at a policy research institute is to ask what types of research it is expected to carry out and whether it has recruited people with the right skills to do this research. More specifically, can the research personnel understand the appreciations or images of the problem held by the persons requesting the research? Can the researchers understand the constraints to action that are imposed by the institutional, legal, and political setting of the agencies requesting the research?

THE TALE OF THE INSTITUTE

In 1969 the administration of Richard Ogilvie was imbued with a vision and enthusiasm for action by state government reminiscent of John F. Kennedy at the national level some eight years earlier. There was a feeling within the administration that Illinois was behind the times. Much needed doing and the doing needed money. There was no way to proceed without additional revenue and the only means of raising more revenue was to make a death-defying leap toward an income tax. Illinois could then show the nation how to make progress on the issues of our time: environment, health care, welfare, and prison reform. The income tax bill passed. It is remarkable, looking back almost ten years, how ambitious and constructive the Ogilvie program was. One small part of it, constituting a reflection of the overall mood of confidence and the belief in knowledge and rational policy making, was the idea of creating a research and analysis group to help the governor and state agencies find better policies to meet the social needs of the citizens of Illinois.

Following the criteria for successful policy analysis laid down by Schick (1971), adequate revenue and the self-confidence and desire of leaders to effect change, the new research institute should have been a success. Thanks to the income tax, ample revenue was available to finance new policies. The governor and his staff were self-confident and convinced that they could

improve state government to help all the people and they were eager to introduce new policies. Yet the Institute for Social Policy was largely a failure. There is little to show for the several million dollars that were spent.

The institute was a singular noun applied to the plural and often conflicting ideas of the multiple fathers of the institute. Some of the governor's staff envisaged the institute as a way to solve the welfare problem through research, meaning both to better help the needy and to protect the state budget. Within the welfare field, some officials wanted to test new ways of administering welfare while others wanted to carry out cost-effectiveness and cost-reduction studies. One advisor envisaged the institute as a means of introducing new policy ideas across the whole range of human service programs, acting as an idea sprinkler that would both improve programs and keep state agencies on their toes. Others wanted concentration on scientific experimentation and pilot programs to test new programs. Still others wanted the institute to restrict itself largely to scientific analysis leading to improved policies so government could become more efficient and effective. There were also those who saw the institute as a means of improving the functioning of government through introduction of better management methods. Thus the institution was seen in many different ways — as a means of carrying out work in one, two or all three of the research types and as concentrating on welfare questions or working across the entire range of human services. Before these differing conceptions could be resolved, the institute was funded and told to get to work.

The institute was proposed to the General Assembly in the early spring of 1969 and funded by a $3.3 million appropriation as part of the Department of Public Aid. However, the legislature was told that as soon as a director was appointed the institute would report directly to the governor. According to Wildavsky (1969), for a policy analysis unit to become effective it must be prestigiously located so that it can both be aware of and deal with issues of concern to the boss and command respect in the eyes of the personnel of the organization. Once again it would seem that the design of the institute met this criterion. However, it did not yet have a director.

The passage of time coupled with the ambitious promises already made to the legislature convinced members of the governor's staff that they must get projects underway, director or no director. So the Woodlawn project came into being. Its purpose was to demonstrate the value of separating welfare grant payments from provision of social services; it was initiated under the direction of Mr. Clinton McKay. In addition, requests for bids were sent out to start baseline survey work for a similar demonstration welfare project in Peoria, though subsequently it was decided not to launch this project until an institute director was appointed. Other smaller projects for improving

billing procedures for paying services vendors and for providing health exams for WIN applicants in Chicago were also started.

In the absence of a director, responsibility for early development of the institute program rotated among several members of the governor's staff. At one point, the three major components of the institute — the Woodlawn program, the Peoria project, and research — were under the direction of three different officials.

I arrived to head the institute in May 1970. During the next year efforts were focused on recruiting staff and planning and initiating the research and experimental programs.

As noted, the General Assembly had been told the institute would do a number of things in the welfare area related to "separation," services, and costs. What the members of the General Assembly remembered, however, was that the "institute would take care of the welfare problem." I remember once being introduced to a legislator by one of the governor's staff as the person who was going to solve the welfare mess. I thought at the time this was a quaint form of midwestern humor. Only later, to my chagrin, did I learn that the governor's staff was as earnest in this statement as they were uninformed about the welfare situation. It wasn't so funny then!

Although the governor himself was not deeply interested in the institute, both he and his staff deserve credit for making this major effort to find new ways to deal with longstanding problems. His staff played a determining role in the conception and development of the institute. The staff members were young, smart, politically astute, but lacked governmental experience and knowledge. They wanted results quickly and generally were not willing to take time to learn about the organic nature of government. It was their intention to force Harold Swank, Director of Public Aid, to do what the governor and they wanted, not by instruction from the governor for they felt this would not work, but by getting outside consultants, management experts and the institute to force the department to go in directions that they and the governor thought proper.

Director Swank, an able and experienced administrator, was raised on a small farm in eastern Illinois. He had excellent relations with the legislators who recognized him as a man of the people, "one of our own." His style, background, and values were radically different than those of the governor's staff. These were people of different worlds; not surprisingly there was irritation and conflict.

The governor gave the institute freedom to recruit the best personnel it could. Recruitment was successful at the junior level, but failed at the middle management level, except in Peoria.

My view of what needed to be done, given the situation in Illinois as of the summer of 1970, was as follows: As a first consideration, our work at the

institute had to be serious, substantive, and professional. The institute would eschew the press conference approach of making promises of great victories. Projects would be commenced only when there was qualified staff to carry them out. The demonstration projects would be carried out in a serious fashion, coupled with solid evaluations of performance. The governor approved of this approach.

It was our hope that by achieving success in one or two good management and cost studies for the Department of Public Aid we could win Director Swank's confidence and gain enough time with the legislature to get our longer-run research programs moving. On the one hand, I knew we could not antagonize Director Swank because the slightest indication by him to the General Assembly that the institute was composed of pointy-headed intellectuals who were messing up the work of his department would be sufficient to end the institute abruptly. On the other hand, we worked for the governor and sought to carry out his instructions and meet his needs. We believed he was courageous and wanted change. His staff, however, gave hardly any guidance to the institute, nor did they criticize the programs developed.

By the late spring of 1971 several projects were well along. I will give my assessment of them even though my direct knowledge of them ends in 1971.

The major welfare activities were the two large and expensive experimental programs in Woodlawn and Peoria. The Woodlawn project was a tempest; trouble followed trouble. The day-care program proved what did not need proving: excellent day care could be provided in 1971 for $5,000 per child per year. The separation of the income grants from the social services portion of welfare proved little except to confirm operationally that the idea of "separation" as conceived by HEW during the 1960s was a mistake. The additional objective of improving the quality of the social services was to my knowledge not achieved. The idea of self-certification, whereby income and other information provided by the prospective welfare recipient is accepted without prior validation was, in retrospect, a cruel way of raising expectations of increased welfare assistance. It apparently encouraged the poor to cheat on welfare applications the way the rich do on tax forms. The raised expectations of assistance, created to gain support for and acceptance of the program by the Woodlawn community, were in the end an albatross. The program was quietly buried. A great deal of effort also went into starting an HMO (Health Maintenance Organization) in Woodlawn, but this also did not work out.

The Peoria, or Tri-County Program was a technical success in that the objective of running and evaluating an integrated intake system for all state social services within the three counties was carried out and statistically tested

as it had been laid out in the project plan. By setting up a separate portal to state social services outside the control of the service dispensing agency and by statistical measurement of results, the project sought to find out if people within this experimental system gained improved access to services, if hard to help cases benefited, if people gained help more expeditiously, and if new people made use of state services. Intake workers were trained to receive all applicants for state social services and to assign them on a "must accept" basis to the correct state agency or to refer them to a voluntary agency. Cooperation by state agencies in this unusual project was good. It was a management success carried out by a skilled and devoted team under Paul Rilling. Yet it too must be classed a failure in terms of providing useful impact on policy in Illinois. By the time the project was completed — on schedule and in three years — Governor Ogilvie was citizen Ogilvie and a new governor who had no knowledge or interest in the project was in office. The project reports were published; perhaps they were useful in other states.

Director Swank and the Bureau of the Budget disagreed during the preparation of the first Ogilvie budget over the number of personnel needed in the Department of Public Aid. The institute agreed to conduct a careful management survey of the intake function at four Public Aid county offices. From these studies the institute would project personnel requirements for the intake function for the entire state. This two-year project was successfully carried out. However, the findings, which largely confirmed Director Swank's estimates, were not accepted because Director Swank had resigned long before the study was finished and the new director, Ed Weaver, wanted his own study.

To help predict and control welfare costs, a contract was let with the Rand Corporation of New York to utilize newly available data that might explain why welfare rolls had increased so markedly. The potentially eligible population for welfare assistance in 1966 and 1967 in Chicago was to be compared to the number of people actually receiving welfare assistance; from this a predictive equation was developed to forecast eligible and actual recipients for 1970. This prediction for 1970 would then be tested against 1970 census data. The study was published, but I do not know if it proved useful.

The institute carried out research on the desirability and means for converting from the then individualized determination of grant levels to a flat, or uniform, welfare grant system. This study was well received. Again, however, it was not directly utilized, leading merely to a departmental study. As one Public Aid official put it, "It was very helpful within our agency to have this comprehensive study showing what might be done." Once again the importance of the rule "we accept our own" was demonstrated. The department did not feel comfortable in moving in this tricky and difficult area until it had its own study.

To effect "separation" of grants and services required by HEW, the Woodlawn program was designed as a pilot project to show how separation could best be carried out in an urban area. Then a statewide implementation plan would be developed from this experience. The institute simultaneously conducted a study of social services to provide an overview of alternative ways of organizing social services across the state within a separated system. This study was completed in summer 1971, but the new director of the institute, Bruce Thomas, decided not to publish or release it.

Hospitals complained during 1970 that they were tardily reimbursed by the state for health care they rendered patients under the Medicaid program. The institute developed data which showed that the hospitals were slow in submitting their bills while the Department of Public Aid was often slow in certifying eligibility of hospital patients for Medicaid reimbursement. A record of what was happening allowed everyone to improve their performance, at least for a time.

In the health area the institute sponsored a project in Peoria using an experienced nurse and triage methods to test a low-cost method of improving health care for poor people. The institute assisted in a survey of the incidence of lead-caused disease in the state. Institute members also worked closely with Dr. Rose Cohenberg and the Department of Public Health in their innovative technical assistance program aimed at helping communities across the state with specific health problems and planning. Furthermore, the institute put together a broad analysis of the approach to reorganizing health care known as Health Maintenance Operation which was then being touted by President Nixon. Partly because of this work, the governor, at least for a while, strongly supported HMO initiatives within the state.

In the area of corrections, the major project was at the St. Charles School for Boys. It sought to demonstrate how college classes could be provided within prison walls and how this advanced education would reduce recidivism. In spite of good intentions on the part of all involved, the clash between the traditional needs of the institute, the desire for quick results by various Department of Corrections officials, and the unfamiliarity of the difficulties of teaching in a prison environment by the contracting Malcolm X College, all resulted in a short, stormy, and unsuccessful life for this ambitious project. The tense white-black relations at all levels during those years also worked against a successful outcome. In addition, considerable research was carried out in assessing programs in other states covering work release and education release from prisons and of alternatives-to-incarceration programs.

This is how the institute looked to me from a project by project view. Possibly a person with an overall view of state government might be able to see how policy analysis came into greater use by departments because of the

higher standards and greater usefulness of research carried out by the institute in the social services area. I cannot attest to such results. But it is conceivable that some demonstration effect did take place. For whatever reason, today major state agencies have their own policy analysis capability.

What Happened?

What happened to an institution that had so many factors going for it? The following list gives a quick summary of some of the reasons for its failure:

- The prime functions of the institute were never clarified or limited. The institute was expected to be — and sought to be — all things to all people, to carry out all three types of research in four different functional areas. The governor's staff did not know what they wanted the institute to do. In contrast, the Institute for Environmental Quality (now Natural Resources) was given a specific and understood function, albeit in a more technical area, and it has thrived.
- Expectations of policy results were excessive.
- Views held by the governor's staff as to what would improve welfare, e.g. "separation," were simplistic and incorrect. The major thrust of the institute's work was vested in two expensive and time-consuming experimental programs. Neither I nor others realized at the time the extent to which such approaches presumed an apolitical and scientific setting for action and were of little use in improving policy.
- The institute was expected to prove its worth overnight; Wildavsky (1969) has argued that a new government research institution must be given at least five years before it can be expected to prove its value.
- There was an unfortunate mismatch between the time when ideas were needed during a period of ample revenues, 1969 and 1970, and the time when ideas and research were available, 1971 and 1972.
- The agency immune systems work very well. It is very difficult to intrude a foreign particle of research into an agency without having it rejected.
- The governor's staff wanted considerable Type I research, but such research requires the greatest breadth and depth of skills as noted earlier. Recruitment failed to attract such people.
- The basic contradiction between the funding and the control of the institute was insurmountable. The attempt by the governor's office to steer the Department of Public Aid in specific directions by using institute research and contracts demonstrated a naiveté about government and was in brutal conflict with routing the institute's financial lifeline through the Department of Public Aid.
- The role of the institute to import new policy ideas into Illinois and

thus keep departmental directors on their toes apparently did not fit the governor's management style.

— Lacking guidance and close contact with the governor and his staff after the blush of early optimism had faded, the institute was increasingly unable to meet the needs of the governor and his staff.

— The institute was based on a peculiarly rationalistic and apolitical view of government which placed too great a reliance on what scientific research could accomplish, especially in the area of Type I research.

— Finally, it is doubtful that at the higher levels of state government there was a commitment to the success of an institute seriously committed to policy research and innovation.

TO CONCLUDE

Not surprisingly, there are no new lessons, just old lessons relearned. Most of the lessons speak for themselves. I will not demean the reader by specifically drawing them out, except to note that it would have helped if I had known more about the welfare and health areas when I took the job.

My conclusions involve two chief difficulties of research: making it useful and making it right. The first relates to the unbridgable chasm that yawns between the researcher and the high government official who wants policy research and advice. The fear of the outsider and the difficulty of explaining "the situation" to the outsider, often lead the government official to couch his research needs in a bland and generally acceptable terminology which masks rather than communicates his image of the problem to the researcher.

The second theme of my conclusions relates to the need to bring values into the center of the research and to assert, where necessary, values contrary to those commonly accepted, or at least to explore consequences of different valuations. The need is not for more scientific research to find the social laws of motion. There are none. There is flux reflected in transient patterns of cause and effect that hold for a time and then disappear. The trick, part art and part science, is to discern the patterns as they evolve and to act on them. This requires more Type I research to better understand what the problems are, not to solve them; to ask new questions, search for new goals, test new values against old ones. Ironically, using research too diligently to solve a problem precludes better understanding of the problem. As DeGaulle said, "I have lived a long life and I have never seen a problem solved."

Type I research requires both understanding the problem through the image of the person requesting the research and then sometimes changing that person's image or conception of the problem. But to accomplish the latter, it is indispensable, as Vickers (1968) notes, to first accomplish the former. University researchers are loathe to do the hard work required to gain an understanding of the image or setting of the problem held by govern-

ment officials. Rather, they tend to view government as an area of exploitation for their research techniques and theories. They have little interest in officials' image of the problem or of the political and legal constraints on policy. In short, they are not really interested in the mandate and realities of the government official for whom they propose to do work. Thus the government official, rightly to my mind, frequently shrugs off the researcher's proposal because he knows the researcher does not understand nor really care about "his" problem. And too often when research is contracted for the researcher proceeds with only his own image and needs in mind. Thus does much research go down the drain even before it is commenced.

There is a pressing need in government to give officials an excuse and a need to see problems in new ways, to imagine new means, or dream of new management techniques. Legitimating new ideas and musings is a priceless value of research. In addition, research creates a language for discussing a problem, a vocabulary that helps a diverse group of people within government to see the problem in a similar way. With this common perspective they can start to decide what to do. This function of research in framing problems and creating the language for discourse is of prime importance. It is most needed in Type I, but is also important to the other two types.

Research is needed on the toughest policy issues such as welfare and health which always combine difficult questions of value and fact. The researcher should not be afraid to weigh in with the values he believes relevant, while making quite clear the factual case for his conclusions. This forces the official at the political level away from his value dominated world toward an appreciation for objective aspects of the problem. To be effective, research must bridge the value world of the politician and executive and the putative fact world of the researcher. Neither, of course, is a real world; only the marriage is real.

Experimental and demonstration projects are seldom helpful in testing new ideas or programs in government, witness the confusion in the wake of the New Jersey Income Maintenance Program. Society, life, and government will not stand still for such programs to be carried out and people will resist being treated as objects of experimentation.

Good management requires a constructive tension within an organization to keep employees alert and striving so that they bring the fullness of their talents and energies to their work. Research correctly used can assist in this process by introducing new ideas and by casting aspersions on existing programs, but only if the boss recognizes this capability of research and adroitly uses the interplay of ideas to ensure that his personnel keep on their intellectual toes.

Research as a means of solving problems has been oversold, as Rein and

White (1977) have pointed out. Other functions of research noted above are more important and achievable.

Finally, there is a pernicious danger in all technical research models since they quantify, dissect, and reify man to such an extent that the organic and living nature of society as well as the uniqueness and beauty of each individual are lost. Wittgenstein and 1001 sages have warned us that as we speak and act, so we become.

The University of California research plan is attractive because it tackles the long-term Type I problems. It could be useful in many of the ways previously sketched such as framing, creation of a vocabulary and pushing government officials out of ruts of thinking.

The problem with this process, as I see it, is that problem definition is still too much removed from the policy user, even given the elaborate project selection process used. It would seem desirable to let the government official play a more active role in helping to define the problem area and to sketch in the problem context, values, and needs as he sees and knows them.

In closing, I would like to make two suggestions. First, to carry out the needed functions of policy analysis as previously discussed, it would be useful to have a state institute working in the social policy area whose director would be a member of the governor's cabinet. Such an institute would have a very small staff and would primarily contract for needed work with outside researchers in the private sector, in universities, and in government agencies. The institute would be a means of carrying out some of the research mentioned and of sprinkling new ideas into state government, making sure the state keeps abreast of policies and ideas in other states, even if they are upsetting to incumbent agency officials. It could also provide a home for visiting scholars in Springfield and for interns working on special projects.

Second, if the California proposal is adopted I would suggest that the institute play a mediating role between user and researcher. The institute could take the agreed upon research projects to the state officials most responsible for policy and operation in the research area. The institute would help these officials work with the researchers to modify their proposal so they better serve the policy needs of the state officials and fit their image of the problem. This would not always work, but it would constitute a partial insurance policy against still another report that gathers dust because it was selected as a faddish subject, had a prestigious author, or used research techniques that were in style, rather than meeting policy needs. The researcher is prone to bend world and state problems so they conveniently fit into his favorite research techniques. The public official is sometimes happy only when the problem is so obfuscated that nobody can study it. Thus the need for an independent pressure to force compromise on both sides. The institute

could also be responsible for quality assurance of the research, monitoring it, screening out redundancy and keeping both parties satisfied and as close to schedule as possible.

In summary, I see a need for research that seeks both to start with and to change the government official's view of the problem, that seeks to find ways to see and understand the problem rather than trying to solve the problem, that seeks to find ways to describe and talk about and measure the dimensions of the problem without coming to conclusions too quickly on what government or society should do about the question. The task of exploring for and defining new problem areas is also very important. It seems to me that universities can play an important role in all of these areas. But it is precisely in these less tangible areas of Type I research that government is most fearful and adverse to requesting research. Moreover, it is in just these areas of research where the personal equation is most vital to success. How does the university researcher change the current and generally warranted impression within government that the researcher cares only about his image of the problem, wants a chance to exercise his research techniques, and desires additional income? How can university researchers earn the trust of government officials so that good research can be carried out? This constitutes the research challenge for universities.

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CITIZEN AND STATE AGENCY RESPONSE TO UNIVERSITY RESEARCH ON PUBLIC POLICY: THE CASE OF *ILLINOIS: TODAY AND TOMORROW*

Rabel J. Burdge and Ruth M. Kelly

The goal of the *Illinois: Today and Tomorrow* study was to provide state and community leaders a picture of what Illinois residents consider to be the major problems facing this state. The questionnaire used in the study differed sharply from those usually used in survey research. It covered a broad range of issues allowing the users of the information to obtain a comprehensive picture of public opinion along with a rank ordering of emerging problem areas. The study was conceived solely as a public service effort to demonstrate one way that the University of Illinois could help state and local government in planning and in the development of new programs.

HOW THE INFORMATION WAS GATHERED

The *Illinois: Today and Tomorrow* project began in late summer 1977 with visits to the legislative staff, most of the major state agencies, some local governments, the Department of Planning in the city of Chicago, regional planning organizations, Cooperative Extension people, and such interest groups as the Chamber of Commerce, the League of Women Voters and the Farm Bureau. Each contact person was given a preliminary list of specific community problems, possible programs for new tax money, legislative issues and energy questions and asked to circulate the list to people in their organizations for additions, deletions, and general comments. From these inputs (about 100 representatives of different organizations and agencies took part), we put together a draft questionnaire which was mailed to a pre-test sample of the general population selected from Peoria, Chicago, and rural Champaign County. In addition, telephone and personal interviews were conducted with selected samples from the Champaign-Urbana area. As a result of these procedures, a twelve-page printed mail questionnaire was developed and readied for distribution.

Sample Selection

From a statewide list of licensed drivers, the *Illinois: Today and Tomorrow* research team selected a sample of 15,000 names to represent all adults in

Illinois. The sample size was chosen to assure that the number of returned, usable questionnaires would be approximately 8,000, or about one questionnaire for every 1,000 adults in the state. (The actual return was 1 for every 914.)

Each county's contribution to the sample is in proportion to its share of the state's population. For example, Tazewell County (across the river from Peoria), which has about 1 percent of the state's population contributed 163 names to the sample, while the more populous Lake County, with approximately 3 percent of Illinois's population, contributed 525. In addition to apportionment by county, the sample was also proportioned by sex and age, the latter being divided into two categories: those under sixty-five and those sixty-five and older.

Within the city of Chicago, population estimates were available by age, race, and sex for each of the sixty zip code areas. Therefore, each zip code was treated like a county which meant that the number of questionnaires sent was proportional to that area's share of the city's population.

Mailing Procedures and Response Rates

The printed questionnaire booklet and return envelope along with a cover letter explaining the purpose of the study were mailed to the sample on January 11, 1978. A follow-up postcard was sent to all persons in the sample the following week, which both thanked those that had answered and encouraged those who had not completed the questionnaire to do so immediately. On February 8 a follow-up letter with a replacement questionnaire was sent to all who had not responded by that date. On March 1 a certified letter which included a replacement questionnaire was sent to all who had not yet responded. The salutation of the cover letter for the certified letter named the sample person. These procedures yielded a 68.6 percent response rate for the entire sample.

In addition to the 15,000 people chosen for the statewide sample, another 2,500 people were selected for data analysis. The additional people were chosen so that the less popuous regions would have enough numbers to make presentations on a county basis. A total of 9,900 usable responses were received. The representative statewide sample includes 8,268 usable questionnaires. Checks were made with the 1970 census and 1975 population estimates, and the sample was found to adequately reflect the Illinois adult population on such characteristics as sex, age, race, education, and marital status.

Data Reduction

The mailed questionnaire was precoded allowing keypunching directly from the questionnaire to a computer tape. Written comments, which appeared

on the backs of about 4,000 of the returned questionnaires were categorized by the major topical areas of the study.

The reliability of the state and regional samples is ±1 percent. For example, the study showed that 28.3 percent of the people answering the questionnaire said that upkeep on local roads was a serious problem. A confidence limit of ±1 percent means that if 17,600 different people were selected using the same procedures, 95 times out of 100 the percent rating that problem as serious would fall between 27.3 and 29.3 percent.

Additional details are contained in a sixteen-page tabloid by Rabel J. Burdge, Ruth M. Kelly and Harvey J. Schweitzer, titled *Illinois: Today and Tomorrow;* Special Series No. 1. It is available by writing 408 S. Goodwin Avenue, University of Illinois, Urbana, Illinois 61801. A series of thirteen bulletins summarizing the results on a regional basis were printed in October 1978.

HOW PUBLIC OPINION POLLS CAN PROVIDE A DATA BASE ON CITIZEN ATTITUDES

All of this raises the question of university involvement in developing a data base such as that represented in a large statewide public opinion survey. The study of statewide problems and issues is important to all people in the state whether they be elected officials, state or local government employees, or private citizens. The university researchers involved in the *Illinois: Today and Tomorrow* study combined a number of factors to make the final product both interesting and valuable to this wide range of people.

- The sample is very large and as such provides extremely accurate and detailed information for all questions by various sub-groups. For example, analysis can be done by residential areas, and all the demographic and social characteristics listed on the questionnaire. The Gallup, Roper and Harris polls use 1,500 people to make predictions about the entire U.S.; we have over six times that number for the state.
- The various parts of this questionnaire covered issues which people were thinking about and dealing with each day such as taxes, government, basic community services and consumer problems. People wrote on the backs of the questionnaire that they wanted to express their opinions on these issues and were glad to have had the chance to do so.
- The response rate to the study was almost 60 percent, which for a mailed questionnaire is incredible. A return rate of 30 percent is considered quite good. While the long, cold winter probably helped, we feel that such an outpouring of responses indicates that people want to be heard, and that these issues are what they want to be heard on. One respondent remarked, "If there are going to be any changes, I want to feel I had a part in bringing them about." As one man put it,

"Thank you for your concern for the public. Frankly, I'd given up hope for small voices in government and industrial needs."

— If the response rates to these polls can be kept as high as in this one, the answers can be viewed as very representative of the entire adult population in Illinois. The first returns to mail questionnaires tend to be older persons, often retired, and mostly female. In the last returns that pulled the response rate toward 69 percent, those who answered were the full-time employed, younger people, members of minority groups and males. Therefore, the results of this study can be thought of more as a "census" because the people in it are speaking for all Illinois adults. As one legislator put it, after seeing the tabloid, it is much like a ledger sheet of the state showing our good points and bad points.

— The results are important because, as pointed out in the section on how the information was gathered, the people that are potential users of the information (legislators, state agencies, extension organizations, and planning groups) were included in deciding what questions should be asked and what information should be collected. As opposed to the traditional research practice where a study is done and then findings are presented, we included questions that people who must make decisions wanted to hear about.

WHAT DOES THE *ILLINOIS: TODAY AND TOMORROW* STUDY SAY ABOUT UNIVERSITY–STATE AGENCY LINKAGE?

Based on the results of the survey there are at least two ways to answer the above question. The first is to report respondent reaction to the survey and the University of Illinois involvement in it and the second is to examine responses to the questionnaire to find what problems and issue areas need research and possibly new policy formation.

Response to the *Illinois: Today and Tomorrow* Survey

Many people wrote on the back of the questionnaire that "the survey was a good idea," or incorporated such an answer in their written opinion on specific topics. Only a few expressed the opinion that spending money on the survey was a waste of tax money.

However, most respondents hoped their opinions would really have some effect on government. They saw the survey as a chance to help change conditions for themselves and others in the state. One Pike County farmer wrote, "I hope in some way this questionnaire will actually help change some things in our lives."

Others said: *"I hope this survey produces positive results as opposed to political fodder." "I am amazed at how detailed this survey is. I hope the information given will be helpful and lead to some changes." "Every state*

and community should have these studies done annually, and then the state should follow-up on the opinions and the suggestions of its people."

Other common responses included: *"Thank-you for allowing a 'John Doe' to compliment and criticize his state's present and future goals." "Thanks for asking! I wish the legislators would start asking, too." "Wish everyone in the state could complete this survey!!" "I also think this questionnaire was an excellent idea. It gave me a much needed chance to voice my opinions." "Do it again!"*

Many of the respondents had complimentary words for the U of I and felt that conducting such surveys was indeed the proper role of the university. It was almost as if answering the questionnaire provided a release of pent-up personal frustrations about a variety of grievances individuals felt powerless to change, such as government, the cost-of-living squeeze, high taxes, inequities in society, unresponsiveness of business to consumer problems and even difficulties in their personal lives.

Comments such as: *"Thank you so much for listening!"* were typical; *"Thank you. I've been wanting to state my opinions." "...This questionnaire ... gave me a much needed chance to voice my opinion." "Please let me know, is there going to be improvement?" "Why doesn't the U of I do this type of questionnaire more often? You might be surprised at the feedback you would generate."*

On the other hand, there were some negative comments, and a few respondents did question the role of the university in these programs. *"These forms are a waste of time and tax money since nothing will be corrected anyway — I will vote in coming elections based on positive response to answers expressed in this questionnaire." "I don't think the U. of I. should be involved in this type of program. The tax dollars for the U. of I. should be used in the education of students."*

We can summarize this section by pointing out that the respondents welcomed this survey as a forum by which they could express their opinions on state and community issues. With few exceptions they felt that conducting a poll on political issues was a legitimate role for the University of Illinois.

SURVEY RESULTS AS A CLUE TO DEVELOPING STATE AGENCY–UNIVERSITY LINKAGES

The results of these statewide surveys can be used as starting points in developing additional research projects or as indications of needed policy development. The people who responded to the survey are, for the most part, not technically able to create policy or even to assess policy on a large scale, except perhaps where their daily lives are affected. But they can say where they are experiencing problems and "where they are hurting." This is especially

true of particular subgroups (e.g., different racial and income groups) of the population and at specific geographic areas of the state.

The results of surveys may be viewed as an analysis of the present situation as described by a sample population within the limits of the questionnaire topics. However, the solutions to the problems and the policy changes that might result are the job of agency and legislative leaders. It is the "small voices" idea mentioned previously. The small voices don't come through in public hearings, town meetings or even in small groups (if we had them on government policy), because most people are basically intimidated in a public setting, either by their own perceived inabilities, or by so-called political and legal experts.

By way of illustration, littering was constantly checked as a major problem in the state. It was named as even more so by respondents from cities and towns. Agency leaders expressed surprise at this finding; they felt (incorrectly, as it turned out) that citizen concern for environmental problems had passed. Attempts to pass antilitter legislation, such as the "bottle bill," have failed due to special interest opposition and not because of public opinion. The results of the survey suggest one area where research on a particular policy issue is needed.

RECEPTIVITY OF AGENCY AND LEGISLATIVE LEADERS TO THIS TYPE OF POLICY RESEARCH

During a recent group discussion on future planning in Illinois, a representative of the Department of Local Government Affairs (DLGA) remarked that the *Illinois: Today and Tomorrow* study was "an indicator of public opinion and perceived issues" and a "clear indicator of areas where the state should be involved both technically and informationally. State government can find in these results a gauge of public receptivity to its policies as well as direction for its public information efforts." In addition to this very generous support of our study, we would enlarge the statement to say that the survey also indicates to state agencies and state legislators public policy research needs not heretofore considered.

In general, the response of people in Springfield both to the idea of and the results of the *Illinois: Today and Tomorrow* research effort was quite good. However, comments ranged from "interesting reading" to requests for "detailed analysis as a central input to the agency planning process." The response from the legislature was positive, and letters from these people indicated that they were using the information in committee and legislative deliberations. As one legislator observed, "this survey confirms a lot of what knowledgeable people around Springfield suspected, but never had a data base to support their personal observations."

The following is an attempt to categorize how agency and legislative lead-

ers have utilized, are utilizing, or wanted to utilize the data base represented in the *Illinois: Today and Tomorrow* study.

As an Independent Poll

The results of public opinion polls on all sorts of issues reach Springfield on a daily basis. Most are sponsored by organizations and interest groups which desire to influence legislative decisions. Also, both agencies and legislators order their own polls. An independent data bank provides a check against polls conducted by the special interest groups.

As a Primary Data Source

While some legislators do order their own polls, most cannot afford them. These legislators will use the results of our kind of study directly. The same is true for the agencies. Their response was: "If I could get one or two questions in the survey and then have a detailed analysis of those questions it would satisfy my needs, and provide an input that would not otherwise be available."

To Support or Refute Common Sense Observations

Many legislators and knowledgeable politicians felt the results on individual questions were not too startling. In fact, they confirmed long time intuitive observations. However, these "experienced" observations had no data base. It should be added that people are more inclined to like public opinion results which support their position, rather than those that refute it.

As a Direct Input Into Planning and Program Development

Few state agencies have the resources for major planning efforts necessary for either new programs or to implement federally-mandated programs. In addition to cost, the problem is one of having trained personnel to do the research and then communicate the findings in comprehensible form to agency leaders. The university is a logical choice to meet this need on a continuing basis.

As a Raw Data Source

Three of the agencies wanted the tape to perform their own analysis. Their rationale was that they have their own programmers and can easily do the analysis that best fits their needs. In the early days of the study, we made the decision that we would do all the analyses for requests from outside the university.

As an Indication of the Mood of the State

Most legislators and agency people reported that they found the study interesting, because it gave them a picture of the thinking for the entire state.

These findings consciously influenced their stand as they reviewed legislation and new agency programs. Some of the legislators also mentioned that it allowed them to compare their positions on selected issues with that of the general population.

Levels of Receptivity

Whether or not people in Springfield were interested in the survey results depended upon how close they were to the center of the world of elected officials. With the exception of the Department of Education and the Department of Public Aid, the newer agencies or the ones that were responsible for administrating federally-mandated programs were the most supportive. Only in rare cases were those agencies that had specifically legislated functions interested in making a contribution to the questionnaire. The sections within each of the agencies responsible for planning were the most interested.

The second most responsive group was the legislative staffs. This category provided much valuable input into the formulation of questions. They were attuned to the needs of the legislature and were interested in direct input into the bills that were either before the legislature or anticipated in the next session.

The third most receptive group were those agencies headed by an elected official, with no direct control from the governor. While not overly helpful in terms of providing questions, they were very much interested in public input into their program and public reaction to some of their new ideas.

The least responsive group was the governor's liaison staff. While they did tolerate our attempts to visit with them, they neither provided input into the questionnaire nor did they provide any comment on the study results. Our general reaction from this group was one of impatience, but in fairness it may have been due to political expediency or the newness of having the university interested in the problems of state government.

PRACTICAL SUGGESTIONS FOR UNIVERSITY RESEARCHERS WORKING WITH AGENCY AND LEGISLATIVE LEADERS

The discussion to this point has focused on the verbal and written response to the *Illinois: Today and Tomorrow* research team, by the agency and legislative leaders concerning our attempts to provide a social science data base for public decision making. The last portion of this paper provides practical suggestions for university faculty who might follow our path.

Involvement of Research Audience in Project Design

The most important rule in developing a successful applied research program is to involve the target audiences in a meaningful way from the very beginning. Nothing insures an organization using the research results more than

having a hand in the conceptualization. While the wording and ordering of the questions are best left to the sociologist, we found that lay persons added many problem and issues areas of which we were not aware. We had hoped that participation in the research process would insure the use of the results, but we did not anticipate that we would receive as much substantive input in development of problem areas. University researchers might focus on more systematic ways to involve agency personnel in the applied research process.

Format of Publications

Researchers must think about presenting their findings in a format which the receivers of that information are most likely to use. The idea for presenting our findings in a newspaper format (sixteen-page tabloid) was hatched by saying, "Of the people we want to talk to, how do they best receive and utilize information?" We concluded that the publication must be short and written in comprehensible prose. The answer was either a magazine or a newspaper, with short feature stories about the important findings of the study presented in a very eclectic manner. Our strategy has been to develop a taste for the findings through the tabloid and then to rely upon short bulletin style publications to provide more detailed information.

Policy Benefits of Research

During each visit to an agency or planning organization, we tried to present the research on the basis of the benefits of such a poll for them. One of the most important was an accurate picture of how the adult population ranked the major issues and problems facing the state. The politicians were interested in legislative issues and a detailed breakdown by legislative districts. The Cooperative Extension and Planning Organizations were looking for input to the planning process and some help in justifying programs to local people. Both state and local governments were interested in what people thought about taxes and spending money on new programs. Without fail each person we met with confidently predicted what answers to each of the questions would be from their perspective. As an additional benefit we pointed out that a reputable university with minimal vested interests is the most qualified to conduct policy research for the state.

The Problems of Disciplinary Jargon

We found that politicians and administrators, when faced with complex statistical and interpretative data problems, lapse into the "down home" or "poor country boy" jargon. Rather than have our work immediately dismissed as incomprehensible, we decided that our written material would be as free as possible of professional jargon. Our criteria were clarity and understandability by a college educated audience. Where possible, technical expla-

nations and sociological jargon were reserved for special publications. Many academicians feel the need to add qualifiers, which expands writing space and generally requires the use of words which have specialized and narrowly shared meanings. In contrast, much of the applied writing must be an extrapolation of the sociological findings to a trend or recommendation that can be useful to an agency or legislative audience.

Explanations of Important Findings

We found that the portion of our findings and discussions that seemed helpful to and was sought by lay audiences was the analysis and implications of changes in major social institutions applied to a local problem. For example, what are the implications for a local school district if the declining birth rate and out-migration patterns continue in rural areas? While such explanations may appear common for the average faculty member, we found that the lay audiences were pleased to have a professional explanation. Of course, the fact that we had demonstrated an interest in their problems helped to pave the way to receiving our explanations.

Role of the University in Public Policy Research

Whether it be Illinois or Kentucky, Oregon or Iowa, many people around the state do not believe that a university is interested in their problems. The reason may be historical, in that, outside of the Cooperative Extension Service and the early Chautauqua programs, colleges and universities have not had the personnel to deal with applied and practical problems. Most professors sought the reputation to be gained from doing national research on national problems. The dilemma that faces the major land grant institutions is that probably only they have the resources to do high quality research; they do not, however, have the reward structure for such work. Declining university employment opportunities have intensified competition for the remaining tenure slots. In the absence of alternative evaluation criteria, universities are more likely to reward the focused specialist. While the public rhetoric of governors and college administrators may favor applied and policy research, that perceived need has not filtered down to the department level. We must change the client group for which findings are intended. The problem of narrowly circulating our findings among persons who think much like ourselves only minimizes exposure and enhances the ivory-tower image. Rewards must be sought for persons who are able to publish good research.

CONCLUSION

This paper has attempted to present in a systematic way the experiences of the *Illinois: Today and Tomorrow* research team in their deliberate effort to provide a public opinion data base on issues of concern to state and local

governments. Probably no experience, reaction or suggestion presented herein is unique. However, taken as a whole they may prepare other university researchers for experiences they may encounter if they choose to actively communicate their work to lay audiences.

To conclude on a personal note, we should like to add that our appraisal of our efforts was quite high. We truly believed that what we did would be taken as gospel by people in Springfield. In fact, many of our findings are having an important impact on public policy; however, the widespread adoption by state government of university input will require many altruistic faculty members providing quality research on a continuing basis.

THE CALIFORNIA POLICY SEMINAR: A DESCRIPTION AND RELATED QUESTIONS*

John Cummins

The California Policy Seminar, established in March 1977 by University of California President David S. Saxon, is a cooperative effort between the University of California and the California state government to define long-term policy issues facing the state and to commission research on those issues.

The seminar is one among several activities in the university designed to make the research resources of UC better known and more accessible to state government officials. The seminar is a continuing process in which at any time the members of the seminar may entertain ideas on long-term problems facing the state, commission research on such problems, review ongoing research and disseminate the results of such research to the public.

In describing the seminar, President Saxon has said, "I know of no other program similar to it in the nation, where faculty and administrators of the state university have sat down with members of the state government to identify long-range problems facing the state. We have done it in recognition of our responsibility to help solve the problems of the state of California."

Soon after the California Policy Seminar was formed, UC faculty were informed about the seminar and invited to prepare "policy abstracts" on public issues facing the state that were amenable to further university research. As a result, 110 abstracts were submitted by individual faculty members that dealt with a wide range of topics including agriculture, energy, economics, land-use planning, community development, health care, welfare, and lifestyle changes among others. Seminar members then commissioned eleven of the faculty members who had submitted abstracts to develop each into a policy paper with a research agenda and budget appended.

The eleven commissioned papers were completed by December 1977, and were twenty to thirty pages in length. The UC Berkeley Institute of Governmental Studies, the administrative unit for the California Policy Seminar

* This paper is a description of the California Policy Seminar and employs a question and answer format to deal with specific aspects of the program. Attached to the paper is a portion of a presentation about the California Policy Seminar made to the Board of Regents of the University of California. This presentation is important because it provides a context for the seminar which could not be covered in the paper.

will publish some of the papers as individual monographs. From the eleven commissioned papers, four were selected for funding. The criteria for final selection were:

- The potential significance of the research to the state of California.
- The likelihood of the project producing useful results for state government policy makers.
- The special need for the research, that it not duplicate efforts currently underway in the university or state government.

The four research endeavors that were selected, and the individuals who will undertake the studies are:

- Investigation of environmental chemicals that cause cancer and genetic birth defects and development of a strategy for minimizing human exposure: Bruce N. Ames, professor of biochemistry, Berkeley.
- Design of computerized models of seventeen population centers in California that will permit determining the impact by region of state policy changes; an example would be state consideration of changing taxation policies: Larry J. Kimbell, associate professor, UCLA Graduate School of Management, and director of economic models for the UCLA Economic Forecast.
- Exploration of social and ecological questions related to agricultural policy in California; an example would be changing population trends and the effect on rural community development: E. Dean MacCannell, assistant professor, applied behavioral sciences, Davis.
- Determination of the savings that would result from establishing long-range standards for energy consumption in buildings and by appliances: Arthur H. Rosenfeld, professor of physics, Berkeley.

These research projects were begun on July 1, 1978, and are funded at approximately $50,000 each total for a period of two years. Each project will be carried out in close cooperation with appropriate state government officials, usually in the form of advisory committees.

A second cycle of abstracts, commissioned papers, and selection of research projects is currently underway. Sixty-three second cycle abstracts are now being reviewed by state government.

Initial funding for the California Policy Seminar is being provided by UC. The total cost for both cycles of the program will be approximately $500,000. If the program is deemed a success, UC plans to submit a request to the state for permanent, continued funding of the program.

Members of the seminar are Edward J. Blakely, UC assistant vice president, Academic and Staff Personnel Relations; Governor Edmund G. Brown, Jr.; Earl Cheit, dean, School of Business Administration, Berkeley; Senator

George Deukmejian; Huey Johnson, secretary, California Resources Agency; Sanford A. Lakoff, chairman, Department of Political Science, San Diego; Eugene C. Lee, director, Institute of Governmental Studies, Berkeley; Alex F. McCalla, professor, Department of Agricultural Economics, Davis; Speaker of the Assembly Leo T. McCarthy.

Also, President Pro Tempore of the Senate James R. Mills; Assemblywoman Marilyn Ryan; President David Saxon; Howard A. Schneiderman, dean, School of Biological Sciences, Irvine; Rusty Schwiekart, science advisor to the governor; Senator Jerry Smith; Assemblyman John Vasconcellos; Senator Rose Ann Vuich.

In addition, the student body Presidents' Council has appointed Paul Rogers of the Davis campus and Kevin Eckery of the San Diego campus.

QUESTIONS RELATED TO THE CALIFORNIA POLICY SEMINAR

Why was the California Policy Seminar undertaken by the university?

While there has always been significant interaction between faculty and members of state government, the kinds of problems facing California in the past decade have required much more scientific, technical knowledge. Because of the intractable nature of these problems, there has been a tendency in the state government to look to the university for solutions. When these solutions were not immediately forthcoming, either because there was no solution or no faculty member was working on that particular problem, the university was viewed as unresponsive and aloof from concerns of the state. This view was heightened by all of the well-known stereotypes in the minds of the members of the university and the state government as they attempted to interact with one another.

To deal with this conflict, the university focused on an improved program of dissemination of its research to state government officials. While this effort was a start in the right direction, it allowed no participation by government officials in the selection of what they viewed as important areas of research for the state. As a result, John Vasconcellos introduced an Assembly bill which proposed the creation of an independent board composed of faculty, government officials, and citizens to commission research projects of importance to the state. While this was a very good idea, the bill was opposed by the university because the board would have been funded out of existing university money, and because academic freedom would have been hindered. The bill called for the funds to be returned to the university as long as faculty members could be found to undertake the specified research.

Because this bill indicated a serious interest on the part of the legislature in helping to define important researchable areas for the state, and because the university was clearly interested in working cooperatively with the state,

President Saxon proposed the California Policy Seminar. It was immediately accepted by all parties, including the governor. President Saxon carefully presented the program to the state as an experiment to determine how the university and the state government might better work together toward the solution of problems facing California. President Saxon's willingness to chair the seminar, and to fund it in its initial stages solely out of Regents' opportunity funds, indicated to the state the university's commitment to the program.

How has the California Policy Seminar been perceived thus far by the faculty and the state government officials?

While no definite conclusions can be reached until the commissioned research projects are completed, a mid-term evaluation of the program from the faculty's point of view has been very encouraging. The interest of the faculty as evidenced in the number of abstracts submitted, and in interviews conducted as part of the evaluation, indicates a very positive response to the program. There has been no negative feedback either verbally or in writing about the seminar from within the university.

Although the seminar has not been evaluated from the perspective of state government, excellent attendance at seminar meetings, the thoroughness involved in reviewing the abstracts and commissioned papers, and the fact that the program is frequently cited by the governor and legislators in speeches as an example of positive cooperation between the university and state government, seems to indicate a real appreciation for the program.

The seminar will continue to be evaluated over the next two years.

In structuring the California Policy Seminar, what were viewed as essential components in building a successful program.

There are two essential components. The first is that joint responsibility has to be built in at every step of the program. This includes determining priorities for research, commissioning policy papers and research projects, joint cooperation in the preparation of the papers and the policy aspects of the actual research, and the joint review and dissemination of the research results.

The second essential component is the involvement of the highest leadership of the university and state government as participants in the seminar. If this is not the case, the program will not be taken seriously by either the faculty or the state government.

What does joint cooperation in the preparation of the policy papers and the policy aspects of the actual research mean? Don't the faculty find this threatening? Is academic freedom hindered by this process?

In the preparation of the policy papers, rough drafts are provided for review to appropriate state government officials and staff. Their comments are then taken into account in preparing the final paper. While it is not required that

the policy papers reflect the state government's viewpoint, it is generally to the author's advantage to do so since state officials commission research projects based on these papers. In the first cycle where eleven papers were commissioned, all of the authors conferred with appropriate people from state government, and generally the final papers reflected the concerns raised in these meetings. Some faculty chose not to include the concerns in their papers, but none found the meetings threatening in any way. In fact, all authors understood from the outset that, since the purpose of the seminar is to provide assistance to the state, such meetings were required. This type of joint cooperation is also expected during the conduct of the research.

It is possible that academic freedom could be infringed upon if there is a major disagreement between the researcher and individuals in state government. In such instances the faculty member has total freedom and is not constrained in any way by the state. Such major differences of opinion would be made known to the members of the seminar, however.

While this potential conflict is a salient problem, theoretically, it has not arisen thus far in the California Policy Seminar.

Has this program improved the relations between the university and the state?

Obviously the interactions between the university and the state are multiple. This program addresses two points of conflict, relevance and degree of responsiveness. Prior to the California Policy Seminar, a high level of dissatisfaction was expressed by the legislature with regard to both. The seminar directly addresses relevance, and since its inception, criticism has dropped off considerably. The seminar indirectly addresses responsiveness. To the legislature, responsiveness means they are being listened to in a wide range of areas surrounding the budget. The question of the university's relevance is only one of those areas. The fact that the university initiated this program and is funding it in its initial stages has been appreciated by the legislature, and this degree of responsiveness has affected other areas of interaction. This view is subjective, of course, but widely shared within the university.

Are there any pitfalls or drawbacks to the California Policy Seminar that warrant close observation?

There are some problem areas that deserve attention. The first is the potential for "end-runs" on the university's budget. It could happen that a legislator is particularly intrigued by a project that was not funded by the seminar. The legislator could then seek funding for this project through special legislation. There is some concern that this could happen on a regular basis, resulting in an inability on the part of the university to set priorities internally and present a unified front in the yearly budget cycle to the state. This has not occurred yet, but there is some concern that it might.

A second problem area is related to the fact that the seminar is administered by the *I*nstitute of *G*overnmental *S*tudies on the Berkeley campus, despite the fact that it is a systemwide program. There is a concern that the program may be looked upon as strictly a Berkeley endeavor by the faculty, or that Berkeley will be favored because IGS administers the program. Every effort is being made to encourage participation from all campuses and our mid-program evaluation indicates no particular bias toward the Berkeley campus.

The third area of concern is the challenge of focusing on longer-term vs. shorter-range problems. The California Policy Seminar is structured to build on the strength of the university — the longer-term, anticipatory perspective. The obvious tendency of the state government is to find answers to problems facing it in the immediate future. The University of California has come to recognize that it is not especially successful as a short-term consulting firm. Keeping the focus on the longer-term will be a continuing problem for the seminar. This is particularly important because it involves expectations about what the seminar will actually produce for the state, and is therefore directly related to the success of the program.

What lessons were learned from Cycle I of the program and how have they been implemented in Cycle II?

A basic difficulty in Cycle I was the inability to communicate clearly the purpose of the seminar to the state government and to the faculty, and to specify what was expected of both parties. With regard to state government, for example, communications to legislative committee consultants usually were filtered through one or two staff people. Their suspicions about the program were communicated, along with suggestions on how it was to function. This led to a failure to take the program seriously by some important actors in the state, a situation that had to be overcome as the program developed. This was primarily reflected in the first cycle in the review of abstracts and commissioned papers. State government reviewers tended to focus on their own particular concerns rather than viewing the proposals in the broader perspective of what was important for the state as a whole. In the second cycle, the review process has been vastly improved as a result of a better understanding of what the program actually is.

With regard to the faculty, a number of problems arose. Finding a way to contact and clearly explain the seminar to over 6000 faculty on nine campuses and in three federal laboratories associated with the university is still a major problem. There are a large number of faculty who do not know about this program, despite the number of abstracts submitted in both cycles. Failure to provide concrete instructions and assistance in the framing of the abstracts, and in the development of the commissioned papers, led to uneven and

widely varying products. This is being remedied by having the director of the seminar visit each campus at the beginning of each cycle to answer questions and provide assistance. There are also specific instructions to the faculty about what should be in the abstracts, and what is expected of a commissioned paper.

Finally, the state government has promised to provide the university with a list of their research priorities. This list will be made available to the faculty and preference will be given to abstracts dealing with these particular topics. However, it is not required that the submitted abstracts deal only with these topics.

How will the success of the California Policy Seminar be judged?

This program will be successful if a high level of interest is maintained by the state government and by the faculty. It will also be evident in the quality of the abstracts and commissioned papers and the way they are reviewed by the state government; the value to the state of the commissioned research products; the level of continuing interaction during the research process between the faculty and state government officials; the willingness of the state to fund the California Policy Seminar in a particularly difficult fiscal period; a reduction in the criticism about the relevance of the university to the state. All of the above can be measured and will be part of the evaluation of the program.

Excerpted Address on June 18, 1978, before the Board of Regents of the University of California on the California Policy Seminar

The California Policy Seminar is, in brief, a program of faculty research and publication devoted to state policy issues which are selected by a joint committee of university and state government representatives. Before presenting the substance of the program, and what will hopefully be accomplished by it, I would like to provide a context for your understanding of it by alluding to some research that is currently being conducted at the Institute of Governmental Studies on California. This research is documenting what we have known intuitively for a long time that California is indeed the "great exception," to use Carey McWilliams term. It is not only a unique society geographically, and culturally different in achievement, resources, and customs, but is indeed the world's first, prototypical, advanced industrial society, and clearly on the frontier of social and economic change.

There are certain variables that can be measured to prove this contention. First, the degree of concentration of high technology industries that are dependent on advanced scientific theory involving major research and development. Second, the number of workers employed in service sector industries — such as communications, transportation, finance, sales, and the professions — as opposed to manufacturing sectors. Third, the degree of rapid change and innovation that characterizes the society. Fourth, the expanded need for information and knowledge; and finally the degree of interdependence among interest groups, political bodies, business firms, and individuals. In all of these indices, California outdistances any other state or nation in the world. This is what makes California such an exciting, diverse, sometimes nightmarish trend setter for the world, and why new issues seem to demand attention in California long before they emerge in other places.

The California Policy Seminar is a reflection of the last variable mentioned above — interdependence. The difficult, highly complex issues we face force much more communication, interest in, and interaction among institutions which used to have a relatively higher degree of insular autonomy. The increasing scrutiny, concern, and interaction of the state government with the University of California is indicative of this growing interdependence. This more than any other reason explains why the value of the university's research resources for the state has been challenged so frequently in the past

few years. Government officials are more and more required to be the arbitrators among various factions of the society on issues which are highly complex and extremely difficult to resolve. The resolution of these complex issues depends a great deal on highly refined, scientific knowledge. For instance, the controversy surrounding the siting of the Sundesert nuclear power plant had to do with the existence, or lack thereof, of a proven technology to handle nuclear waste; and with the likelihood of alternative energy sources meeting the power needs, should Sundesert not be sited. Another example is the highly technical, scientific requirements embodied in the Federal Clean Air Act.

A government official, as the final arbitrator, will often look for solutions to the primary research institution of the state, i.e., the University of California. If the solutions aren't forthcoming, for a variety of reasons, the university is an easy target on which to vent frustration, especially because hundreds of millions of dollars of the taxpayers money are being used by the university. In case after case, when this situation arises, accusations are traded back and forth which deal with expectations and competing values. The underlying motivation for this tension, however, is the desire to work cooperatively towards a resolution of the existing problem. Getting beyond acrimonious exchanges to a productive, cooperative working relationship demands an understanding of how two such diverse and differently motivated institutions as the university and the state government can communicate with each other. The fact of the matter is that these two institutions often do not understand each other very well. Yet as the result of the force of events, they are inevitably being forced into a marriage with each other. Since the marriage must work (divorce is not an option in *this* relationship), an increased understanding of one another and an ability to communicate with each other are very important. This involves a willingness to reexamine the myths and stereotypes about one another, to be flexible, and to accommodate when necessary to changing circumstances. The California Policy Seminar provides an opportunity for this to occur.

The genius of the California Policy Seminar is that its central underpinning is joint responsibility. No true, enduring relationship can exist without it. It is a tribute to President Saxon's leadership that he took the initiative in structuring the program in this way. Thus it is that the California Policy Seminar, the formal name for the executive committee which administers the program, is composed of the president of the university and several designated faculty, and the governor, Speaker of the assembly, and president pro tempore of the senate, and their designated representatives, and two representatives of the student body.

The major challenge in this joint relationship is to match the long-range

and fundamental research of the university community with the pressing needs of state government. Both groups have agreed to work together to define problems of special importance to the state which are amenable to scholarly research, to commission such research, to ensure that the research is done in close cooperation with appropriate policymakers, and to jointly issue the results, which will generally include policy options for the state.

What is most important about this unique experiment is to come to a better understanding as to how the university and the state can best work together. Here are some of the things that we have learned so far.

First of all, the idea that faculty are ivory tower intellectuals with little interest in and sometimes disdain for relevant policy research is simply not true. The Policy Seminar, in little more than one year of operation, has catalyzed the interest of over 150 faculty in making their research known to state government. In an independent evaluation of the seminar, those faculty who have participated were asked what their primary motivation was: publication possibilities, research funding, or interest in making their views known to policymakers. Invariably the response was the last. In fact, many mentioned the excitement of being part of an experiment in bridging the gap between the university and state government.

Second, it has become clear that in the field of policy research, there are some things that the university can do better than others. The strength of the university is in longer-term policy analysis, not in brush-fire solutions to immediate problems. There are a plethora of good consulting companies that can handle the latter. The Policy Seminar is structured to handle the longer-term, more anticipatory problems, and this is clearly understood by the members.

Third, there will probably always be a tension as to priority between the short-term, crisis-oriented problems that government deals with on a day-to-day basis, and the longer-term problems that require anticipatory analysis. This requires a degree of flexibility and accommodation to change on the part of both the university and state government. The challenge is to find those problems looming on the horizon that will have dramatic impact on the state in the next few years, but where there is still enough time to delineate and evaluate policy options and their possible consequences.

Fourth, with regard to state government, there appears to be some difficulty in developing a broader, more long-range view of the state because of the immediate press of day-to-day events and the realities of the political calendar. While the long-range view is seen as important, it often takes second place to the crisis of the moment. This was reflected in the review of the abstracts and policy papers in the first cycle, which tended to focus on the immediate needs of specific committee chairpersons. But already changes

have been made in this regard. In the assembly, for example, the Speaker has designated a committee of twelve of its members for final responsibility for review, and they are to be staffed by the director of the Assembly Office of Research. This in itself is a significant step forward because it formalizes, in the legislature, a longer-term perspective on problems confronting the state.

Fifth, the decision by President Saxon to administer the California Policy Seminar through a campus-based organized research unit seems to be working quite effectively and demonstrates the validity of the president's policy of decentralizing operating responsibilities to the campus as much as possible. By tying this program to the Institute of Governmental Studies at Berkeley, which has a long history of service to state government, the program has added credibility in the eyes of state officials as well as within the university. This, coupled with the fact that the President chairs the Policy Seminar, makes it quite clear that this is a solid, academic undertaking with the full sponsorship of the university. In turn, the participation of the highest level of state government leadership also makes it apparent to the faculty that their ideas will be taken seriously.

And finally, there is some indication that California is again taking the lead for the nation by establishing the California Policy Seminar. States like Illinois, Connecticut, Texas, and Oregon, and even places as far away as British Columbia have evidenced an interest in developing similar programs as a result of what has been started here.

In conclusion, there seems to be every indication that the California Policy Seminar is shedding new light for both the university and state government on how they can work together more productively and cooperatively, and in the process contribute to the solution of some of the significant problems facing this dynamic and exciting state.

THE PROS AND CONS OF COOPERATIVE STATE GOVERNMENT–UNIVERSITY PUBLIC POLICY RESEARCH

James P. Hartnett

Increased state government–university cooperation is a delicate issue if the intention is to involve more faculty members in policy level studies to be used by the executive or legislative branches of state government. One of the reasons for this sensitivity is that neither the political nor the university leaders (members of boards of trustees, presidents, vice-presidents, chancellors) have tenure and their retention in office is influenced by statements or reports dealing with public policy issues. Consequently, there is a strong incentive in the top echelons of state government and the university to control any publications or statements by their respective staff that touch on such sensitive issues. This control is easier to exercise in state government (executive and legislative) than in the university since those dealing with policy in state government positions are politically appointed and can be readily removed or transferred. In the university, however, the senior faculty have tenure accompanied by academic freedom. As a result there is little control exercised by the university administration over public policy statements by tenured members of the university community. Likewise, state policy makers can exercise very limited control over a tenured professor even if the faculty member is carrying out a policy study under contract with a unit of state government.

Little wonder that university administrators and political policy makers alike are reluctant to encourage wide scale participation of tenured faculty members in public policy research. In fact, the academic faculty itself should be concerned about this topic since the university budget (including academic salary increases) is ultimately determined by the state legislature and the governor. Such budget decisions are influenced by the relationship between the central university administration, the legislature and the governor. Even now, this delicate relationship is strained when individual faculty members take public positions, written or spoken, which jeopardize a goal of any of the state government or university leaders. Considerably more strain would result if such critical policy statements were forthcoming from a faculty mem-

ber who is carrying out policy research in a related program specifically endorsed by the university administration.

A key question then is whether it is possible to carry out policy research on a broad scale in university-established centers and institutes without placing constraints on the university participants in such research. If constraints are necessary, they should not violate the traditional academic freedom of the faculty member nor should they open the door to increased state government control over the internal affairs of the university. These problems pose a difficult challenge to the university system, but I believe they can be solved. First, there should be no all-university policy center dealing with a wide spectrum of topics — energy, environment, education, crime, transportation, housing, etc. Rather, there should be separate policy centers dealing with a specific topic — energy, environment, etc. With this arrangement, a faculty member would, under normal circumstances, be connected with a single policy area. Special sensitivity would only exist in one policy area, and the faculty member would be as unconstrained as any other faculty member in speaking out on other policy areas.

A remaining issue is the development of an acceptable mechanism to safeguard academic freedom while not jeopardizing university–state government relations. A possible model to achieve this is found in the case of private industry sponsorship of university research which provides for the protection of the industrial client by placing some restriction on the release of research findings during the term of the contract, provides for joint clearance of publications and, in some instances, delays ultimate publication of the results for a specified period. It is recognized that this is a delicate business which in the long run will succeed only if there is good faith and trust on the part of all participants.

Why should the university engage in policy level research in the first place? In the judgment of many faculty members, policy questions represent short-term problems, and the prevailing view of the faculty is that the university should concentrate on long-range problems. Accordingly they argue that the goal of increased state government–university cooperation can be accommodated by restricting cooperative programs to non-policy level, long-range disciplinary research between university departments and state agencies. This approach would be responsive to the criticism that the university, as a state supported institution, is playing a role in assisting the state in the solution of difficult problems. I would argue, however, that this approach, while relatively safe, does not maximize the potential contribution of the university to the solution of difficult contemporary problems being faced by state government. Many of these problem areas (energy, environment, public health, education, crime) are of such a nature that the contemporary prob-

lems are the result of policy decisions taken some time in the past — and conversely current policy decisions will have effects far into the future. In fact in the energy area, federal and state level policy decisions made now (and even a decision to do nothing is a policy decision) will control the energy future of the country over the next two to three decades. Thus, even if it is argued that the university should only engage in long-range research, policy studies would still meet this criterion.

Another characteristic of current public issues is that they involve a number of disciplines — economics, physical science, technology, social science, etc. — and to properly identify alternative policy options, an interdisciplinary approach is required. With few exceptions, interdisciplinary studies have not been the strong point of the university which is more or less structured along traditional disciplinary lines. In contrast, organizations such as the Rand Corporation and the Hudson Institute have been successful in carrying out interdisciplinary policy level research, and the Rand Corporation is now awarding a Ph.D. in policy analysis. It is important that the university develop competent interdisciplinary graduate programs built on a sound research base if they are to remain a vital force in research and education. State level policy studies offer an exciting opportunity for expanding existing interdisciplinary studies and for developing new ones.

The evaluation of the performance of faculty members involved in interdisciplinary programs poses special problems. Traditionally the university has depended on publication of books or publication of research papers in recognized journals as a major criterion for promotion. Such publication is evidence that the work of the involved faculty member has met the standards of the profession. Unfortunately, interdisciplinary studies, including most policy studies, do not lend themselves to such publication. The evaluation process is further complicated by the fact that interdisciplinary research is a group effort, and it is difficult, if not impossible, to assign individual credit. Further, there are no widely accepted standards of excellence for work in public policy analysis.

It is often argued that the above considerations allow a weak scholar to move ahead professionally in interdisciplinary work whereas he or she would not measure up professionally in any of the disciplines. Although these problems of evaluation are formidable, the university which has established standards for a wide variety of disciplines should be capable of developing standards and procedures for evaluating interdisciplinary and/or policy studies. Obvious approaches include the use of outside readers from well established interdisciplinary centers, review panels, and evidence of the application of results.

Another feature of current policy questions is that they are so complex

TABLE I. INCREASED EMPHASIS ON STATE POLICY STUDIES AT THE UNIVERSITY OF ILLINOIS

Arguments For	Arguments Against
The University of Illinois is funded by the people of the state. As a state university, it has responsibility to provide assistance on policy issues to state government.	The most significant contribution of the university is in basic research and education. In addition, faculty members will be more effective as constructive critics of state government if the university is not involved in policy studies.
Eventually the state legislature will insist on more university involvement in policy research. The university is better advised to move expeditiously and set up its own internal system to carry out policy research in a framework which safeguards academic freedom and tenure.	It has the potential for jeopardizing the delicate relationship between university administration and state government leaders — negatively influencing the university budget. This may lead to formal constraints on public statements and publications being imposed on segments of faculty (i.e. faculty of policy centers) leading ultimately to more control over all faculty activity.
Policy decision on current problems — energy, education, crime — have long-term effects. (As an example, federal and state policy decisions in energy will determine next 20 years). Thus, these are long-range problems.	Contemporary problems of the state are short-term, whereas the university should concentrate on long-range problems.
It is important for the university to improve capability in interdisciplinary research. Organizations such as the Rand Corporation and the Hudson Institute have demonstrated capability in interdisciplinary studies and may eventually take over a large part of role in graduate education and research traditionally played by the university. State policy studies offer an excellent opportunity.	A university is organized by disciplines not effective in interdisciplinary studies. University faculty are not attracted to interdisciplinary studies.
The university needs to reevaluate requirements for promotion and tenure. Significant contributions to industry by way of patents, inventions etc. are now being considered. It is even more important to reward meaningful contribution to state government.	University promotion and tenure depends on published research. Interdisciplinary and policy studies are often not published. Measurement of results is difficult.
Interdisciplinary centers are not in direct competition with departments; need strong departments to ensure quality interdisciplinary research.	Interdisciplinary centers are potentially disruptive to traditional university department structure.
The university has access to authorities in many disciplines; present day problems often require more expertise than is available in state government.	The university is not geared to providing rapid responses to difficult state policy questions; these are best left to government.
Current problems are so complex that they are not often understood by many policy makers and the general public; university is uniquely qualified to educate.	

that they are not well understood by the general public and by many policy makers. As a result, the public loses interest in the problem and does not develop a consensus. This leaves the policy maker in the difficult position of not knowing how to respond to satisfy his constituents. This often leads to inaction on the part of legislators and the problems remain, often growing in intensity. The energy problem is a good example of this phenomenon. This situation provides the university with its commitment to education and its reputation for objectivity with an excellent opportunity to dissect the particular problem and to present the analysis in simple terms to the general public and to public policy makers. Special short courses, seminars and conferences are ideally suited for this purpose.

The above factors, along with a few others, are summarized in Table I which spells out the arguments for and against cooperative state government–university public policy research. While the arguments on both sides are substantial, the arguments against generally reflect a commitment to the status quo while the arguments for reflect a commitment to new direction. I come down on the side of supporting an increasing emphasis on public policy research. I am confident that the university is capable of making the necessary adjustments and that the institution will improve in the process.

SPEECHES

FACULTY RESEARCH IN THE PUBLIC POLICY DOMAIN: AN OPPORTUNITY FACING THE UNIVERSITY

Peter E. Yankwich

The intellectual resources of the University of Illinois are immense, as is the number of the contributions its faculties make to the advancement of knowledge in many disciplines. Many of you who came by automobile to this conference drove mile after mile past fields nearing harvest whose bounty is due in great measure to the research of the faculty of this great land grant university.

Unfortunately, there are very few other areas of scholarly productivity so obvious to the public. Lay persons do not easily see and recognize the results of our research in fields once-removed from agriculture. Some of those persons wonder how other faculty research serves or can serve the state of Illinois.

Before relating the agenda of the President's Assembly to research in the University of Illinois, I would like to remind you of the uniqueness of this university among senior public institutions in the state. That uniqueness derives, of course, from the research activities of you and your faculty colleagues.

FY77 expenditures on university research in Illinois (all sources of funds) totaled at least $186M, of which $106M was expended in the senior public universities of the state. The University of Illinois —

- received more facilitating support for research (departmental research) ($24M) than all other state universities combined ($17M)
- won eleven times as much federal support for research ($48.5M) through faculty entrepreneurship (in competition with peer faculty across the nation) as all other state universities combined ($4.5M)
- and, for every facilitating state research dollar won $2.26 in outside research support, in comparison with an average of $0.36 for all other state universities in Illinois.

The "leverage" accomplished by state facilitating dollars depends, of course, on a constantly changing admixture of faculty and federal interests. The long levers are in the areas of pure and applied science for which the University of Illinois has long been famous; the short levers reflect the "un-

fashions" of the times — except for the case of business management, which seems to be ill-funded because of the relative recency of the move in the discipline from concentration on cases to pursuit of general research objectives.

The triad of engineering, agriculture, and health professions takes over half of the actual dollars expended by the state for departmental research. Transportation, business and management, education, law, public affairs and public service — that is, the *public policy* areas — are near the bottom of the departmental research list. Perhaps this assembly can suggest ways in which new initiatives can command increased research support in public policy areas.

Others than ourselves are interested in the nature, scope, and scale of research in universities. The Program Staff of the Illinois Board of Higher Education has some very definite ideas on the subject. That staff has been involved in the proposal/approval process for all *new* "units of research" for some time. Recently, the staff proposed (the Illinois Board of Higher Education approved these proposals at its November 1978 meeting) that review of *existing* research centers include similar examinations and tests:

- What is the scholarly productivity of this research unit?
- Does it now or is it likely to play a major research role at the state or national level?
- What is the record or capacity of the unit to attract external support?
- What is the importance of this research area to the state of Illinois?

It seems likely that the Program Staff of the Illinois Board of Higher Education will attempt the development of methods for making these examinations and applying these tests uniformly across senior public universities in the state. While such a uniform approach will certainly conserve the effort of the IBHE staff, both the process and the result may involve substantial risk to the research activities of the University of Illinois. Those activities are not just quantitatively in a different class than those of other public universities in the state, they are qualitatively different. The University of Illinois is the only public institution in this state from which there is a substantial yield of discipline-driven research. If the tests implied by the fourth question above relate "importance . . . to the state" to academic quality and significance as measured by disciplinary yardsticks, the University of Illinois will have no cause for concern or alarm: in most disciplinary areas it is the only public university in the state that is productive. If "importance" is measured against yardsticks devised by state government consumers of research (for example, the several code departments), then the testing will miss the University of Illinois' great contributions except in a few areas of applied art and science.

Discipline-driven research is little understood outside of academic communities or inside statewide coordinating boards. I wonder if you can see some difficulties with the application of a test of "importance . . . to the state" to University of Illinois research in archaeology, ancient technologies, Norse philology, or Seyfert galaxies? It would be difficult to discover a compelling interest of the state of Illinois in research in any of these areas; yet, to the University of Illinois, research in such areas may be very significant if not highly central.

The third question seeks to test the record or capacity of a research center to attract external support. Many units of the University of Illinois have enviable records in attracting funding from a wide variety of external sources. Yet, there are many broad areas (e.g., the humanities) in which there never has been and is not now funding available in anything like the degree necessary to yield parity among all University scholars. One hopes that the comparisons for this test will be made across institutions and within disciplines rather than the reverse; otherwise, little but mischief and further imbalance is likely to result.

The first two questions to be asked about research centers are more comfortable for the University of Illinois. The first question asks about scholarly productivity, and one is entitled to presume that the standards of scholars will prevail. The second question asks about the significance of the research role of the unit at the state or national level; here, too, one is entitled to presume that the standards of the discipline will obtain.

However, where statewide concerns are involved it is not always certain that demonstrations of quality and capability will prevail. Recently, the University of Illinois and another senior public institution were candidates for designation by the governor for the privilege of competing with institutions in other states for federal support in a certain research area. Both the quality and quantity of University of Illinois effort in this research area are distinctly the superior. Yet, the designation was awarded to the other institution in part because of its location and in part because of a state Master Plan statement which appeared to confer primacy upon it in the research area in question.

So, there are factors other than the overall quality of the university, the scholarly dedication of its faculty, and brilliance of their research product that have meaning in the determination of its fortunes. Perhaps the building of new bridges to the state is one way of improving the understanding that others have of the academic value systems which we have embraced and which serve the state by maintaining and enhancing the quality of the University of Illinois.

"New bridges" and "new linkage mechanisms" are important subjects of this conference. This assembly was called by the president "to bring together faculty who are both interested in and knowledgeable about many of the future public policy research issues that will face Illinois; to discuss present and potential mechanisms within the university that can make policy-related research of greater service to state government in the investigation of long-term policy needs."

The chairman of this conference, Professor Gove, has identified this as a *faculty conference*. It *is* a faculty conference without direction from above. It is entirely possible that after careful consideration of the opportunities that confront us and the problems associated with those opportunities the faculty members of this conference will decide that the building of new bridges and the assembling of new linkage mechanisms should be done by another Illinois university or by another kind of institution. That is a possible outcome of this conference and one that would have to be accepted.

On the other hand, the times are especially ripe for closer interaction between state governments and public universities. The genius of the California Policy Seminar is that its faculty architects devised a way in which university scholars made their academic knowledge and skills available to the state on essentially disciplinary terms; the research proposals originate with the faculty and reflect their scholarly and professional interests. The organizers of this conference ask you to consider ways in which the legitimate research efforts of faculty might be brought to bear on questions of public policy in Illinois. This is not yet an issue, it is simply an opportunity. We ask that you apply to it the intense and sincere thinking which characterize faculty conferences on research.

THE UNIVERSITY AND THE STATE: IS THERE A PUBLIC INTEREST IN THEIR PARTNERSHIP?

Theodore J. Lowi

The story is told of a young American concert violinist performing in Italy. At the end of his performance he was called back not for one but for a second, a third and a fourth repeat of his finale. Before going on for his fifth encore, feeling triumphant, he asked his Italian manager what the audience was shouting. The manager responded, "They are saying that maybe if you keep playing it, you'll finally get it right."

Our hosts have invited me back to sing the same song I sang in 1972.* Maybe they're hoping I'll get it right this time. Maybe they're hoping they'll get their own song right this time too.

Circumstances *have* changed. Even if the song is the same, the orchestration may be very different. In 1972 we were prosperous, topping out a decade of growth in education unprecedented in our history, especially in the state of Illinois. Universities are no longer able to bargain from a position of strength, and things may get worse, especially for public universities, because of that new mentality called Proposition 13. Of course, some things remain the same. The Institute of Government and Public Affairs has remained the same, at least in its hope for a productive partnership between the state and the university. Legislatures continue to hope that the universities can actually solve their problems for them, and if not that, at least endorse their mistakes as the best that modern science can produce. And academics seem to continue in their hope that they can exploit any and all opportunities for more resources. For example, the California Policy Seminar. What a nice way for Berkeley to continue to dominate the California University system and for the California universities to dominate all the other institutions in California higher education. Some members of American universities, though their numbers may be decreasing, actually continue to think sincerely they could solve society's problems, if only they were listened to.

* Dr. Lowi is referring to a previous university conference entitled, "The University and Emerging Federalism: A Conference on Improving University Contributions to State Governments," held March 1-4, 1972 at Harrison House, Lake Bluff, Illinois. The final report was published in the *University of Illinois Bulletin*, vol. 70, no. 18 (September 15, 1972).

In 1972 I expressed as ardently as possible my concern for the harm that a partnership can do to the university, and I have not changed in that. However, the passage of time and the changes in the economy of the university have imposed upon me a clearer recognition of the incompleteness of my 1972 position — leading me to a shift of emphasis. Rather than deal only with what universities have to fear from governments, I want to look also at what governments have to fear from a partnership with the universities.

I begin with a short story drawn from the 1977-78 effort by Congress and the Carter Administration to reevaluate civil defense policy. It opens with some passages from appropriations hearings in the House on the Department of Defense budget for fiscal 1978.

Congressman Nedzi (D., Mich.): To what are you referring when you say Federal relocation centers? This is the organization, civil defense organization?

Mr. Shafer (Director of Logistics, General Accounting Office): The Defense Civil Preparedness organization has eight relocation centers [which] . . . have been hardened to resist blast damage. They have been equipped with eating facilities, water reserves, sewage disposal facilities. . . .

Congressman Whitehurst (R., Va.): And who goes there, the officials?

Mr. Shafer: The federal officials in that area.

Congressman Whitehurst: Therefore, in a crisis or in the event of an attack they would be issuing orders relating to the protection of the civilian population?

Mr. Shafer: . . . the eight Federal centers would be the areas around which the Nation would coalesce for whatever action should be taken to survive in a post-attack situation . . . each of those eight are interlinked with [the President's command center] in a communications network. So that the national center where the President would go, plus the eight centers form the nexus for continuity of Government in the United States.

Congressman Nedzi: If I might just pursue this a moment longer, who are we talking about so far as being assigned to these hardened centers? For instance, Battle Creek [the site for one of the eight centers] isn't too far from Detroit [the Nedzi home base]. Am I going into one of those holes, or what?

Mr. Shafer: That is right . . . cadres have been formed under the preparedness program. Each of the agencies — Departments of Transportation; Agriculture; Interior; Health, Education and Welfare; and so on — has been asked to designate two separate cadres which can fulfill the missions of those agencies.

Congressman Whitehurst: In other words, the life of the Nation goes on.

Mr. Shafer: That is right.

Congressman Whitehurst: And the structure of the organization remains intact?

Mr. Shafer: That is right.

Congressman Beard (R., Tenn.): While we have these eight Federal centers, the problem is that we will have a bunch of people isolated that may be safe but they do not have a survivable communications network at this time. If I am not mistaken, we do not have hardened communication sites for our actual nationwide survival.

Mr. Shafer: In the absolute sense you are absolutely correct. And it is probably doubtful that you could provide the type of hardened communications that could survive in the extreme. However, the government is now developing [what we believe] will provide a reasonably survivable communications system. Now, whether you need any more than that, we have a question.

Later on in 1977, when President Carter decided to make civil defense one of his major reorganization efforts, his staff engaged, among others, a couple of young political scientists to prepare a report on reorganization of the several civil defense and emergency disaster agencies into a single agency. After lengthy and serious study of the entire problem, these two young men came up with a report that expressed some doubt about the value to be gained from fusion of these various agencies. More importantly, they questioned the preparedness model itself. There were essentially two dimensions to the argument. First, the planners had overlooked American federalism, so that in providing for "continuity of government" by putting federal bureaucrats in the hardened centers, they had overlooked the fact that most of the essential governing in the United States is done by the states and the cities. The federal bureaucrats, even with a dependable communication system, would be maintaining only their own continuity and would be issuing orders that would go nowhere and accomplish nothing. The centers would essentially be centers for the survival of the top officials, not necessarily for the survival of the nation. Second, assuming that at least 20,000,000 and very probably over 100,000,000 Americans would lose their lives in the event of an all-out nuclear attack, a preparedness model based upon the legitimacy and continuity of any government is only one model, and very probably the wrong model from which to plan for life after the attack. A chaos or state-of-nature model might be more appropriate, in which people are truly decentralized back to the small communities and collectivities in which they find themselves as survivors. Gandhi may ultimately be the true prophet of post-nuclear civilization.

This was a disinterested and serious analysis of the situation and, as far as I could see, deserved circulation and at least some discussion in the government. Instead, within a month of the handing over of the report, the two young men received the following terse response:

The findings and recommendations of this study run counter to current administration policy. . . . Any implication of DOD endorsement of this study would give the impression that the Department is trying to undercut the President's

decisions on these matters. This study should not be published by the DOD, nor should DOD funds or sponsorship be used in any way to support its publication by anyone outside the Department.

End of quote, end of project, end of criticism, and continuation — unassessed — of the basic model guiding national disaster planning.

The following propositions were inspired in great part by this story, but they are mightily reinforced by three excellent papers in your Assembly packet, those by Schmidt and Wehrle, and the introductory paper by Flynn and Stukel.

- Government officials — bureaucrats and legislators — tend eventually to see their work and their organization as identical with the public interest.
- Public officials tend eventually to assume that there is a connection between decisions at the center and results consistent with those decisions at the periphery.
- Public officials are willing to pay for outside advice and take it seriously when it is reported in terms consistent with committee or agency operations and the implicit or explicit decision-making model of the agency. The advice can be critical but cannot argue from or for a competing paradigm. As Dr. Schmidt implied, "Love me, love my mandate." Academics are also conservative with regard to their prevailing paradigm — if we can believe Thomas Kuhn; but the consequences of this conservatism are far greater for governments, especially administrative agencies. Ironically, agencies have to be more receptive than academia to innovation, because agencies act upon their paradigm, whereas academics only analyze on the basis of theirs.
- When advice is contrary to the operating paradigm, it is resisted not because of hostility to new ideas but because new paradigms have organizational and political significance. There is a bumping effect to be feared. The new paradigm will not only be resisted; an attempt will be made to suppress it.
- Good advice, therefore, is advice that reinforces agency or legislature predispositions. The best advice, and the advice sought, is that which amounts to an endorsement of the agency or legislative predisposition.
- Moving beyond the case, but in direct logical line with it, if an agency or legislature has no predisposition or mandate, they are open to new paradigms, innovation, and bold thinking. And they are most receptive here to university cooperation.

But here's the rub. Where the university could be of best use — in the identification and criticism of existing decision-making models — agencies and legislatures are most resistant. And where the university's opportunity is

greatest — in the event there is no model to defend — its potential for mischief is also greatest. I have one particular thing in mind, and I want to pursue this through to the very end of my address. One of the major contributions of academic science is systems thinking — not in some narrow technical sense, but "system" as abstract and broad, contextual thinking, within which the effort is made to deal with each particular datum or problem in terms of the universe of forces acting upon it. The urge of systems thinking is to understand the totality of relationships, despite the fact that these may be an infinite number.

Whatever good systems thinking has brought to science in the twentieth century, it has had a definitely mischievous effect on public policy. In a pre-twentieth century world, sensory experience defined social problems, and public policy was a reaction to sensory experience, expressed in rather explicit and concrete instructions to citizens, or to agencies for implementation upon citizens. If the problem required the building of a bridge, appropriate experts would certainly have been employed; however, the goal was clearly and concretely designated by legislation. If the problem was one of public order, rather than public works, the policy tended similarly to emerge out of reactions to sensory experience. As a consequence, state regulatory legislation during the nineteenth century was quite clear and concrete in the definition of the conduct to be regulated and sanctions to be applied. If the problem was property protection, the solution tended to be an explicit designation of trespass or fraud or breach of contract; if the problem was restraint of trade, the legislation would be laid against the practices of price discrimination or elimination of a competitor, or something specific and concrete like that. But note from the Table drawn from my 1969 book, *The End of Liberalism,* that as time marched on, the definition of public problems for regulation seemed to depart further and further from sensory experience; definitions moved from concrete to abstract, from particular to universal, from situation to system. Public works policies display the same increasing preference for broad enabling legislation at the system level, which authorizes an agency to build "an integrated transportation system" or a "model city" or a "new town" or "environment-safe projects." Even such an old and confident project builder as the Corps of Engineers prefers now to show that each project has been derived from a regionally-considered cost-benefit analysis. It may be in part political strategy, but in large part it is sincere; and why indeed should the appearance of systems thinking be good political strategy? This is all part of the change toward conception of problems as part of an abstract, totally interdependent system. Policy making by abstraction from sensory experience has spread to every policy area.

I attribute this development toward abstraction almost entirely to the re-

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TABLE I. THE DEVELOPMENT OF PUBLIC CONTROLS IN THE U.S.: AN ANALYTIC SUMMARY

Scope of Control	Objects of Control	Developmental Characteristics
The railroads in Interstate Commerce (1887-)	The railroads.	concrete specific traditional rule-bound proscriptive
The Trusts (1890-)	Oil trust, sugar trust, liquor trust, cottonseed oil trust, etc.	concrete *general** traditional rule-bound proscriptive
Goods (1906-)	Qualities of things, substandard foods, impure drugs, immoral women, obscene literature, etc.	*abstract* specific traditional rule-bound proscriptive
Commerce (1914-)	Relationships. Competition, fair and unfair. Qualities of commerce.	abstract general traditional *discretionary* *prescriptive*
Factors (1933-)	Qualities of commodities behind commerce. Qualities of land, capital, labor and relations relevant to them.	abstract general *novel* discretionary proscriptive
Exchange (1933-)	Qualities of relationships. Open-ended.	abstract *universal* novel discretionary prescriptive
Markets (1934-)	Structures of relationships. Open-ended.	abstract universal novel discretionary *categoric*
System	The environment of conduct.	concrete universal traditional redistributive categoric

* The major innovation of each phase is italicized.

discovery of the interdependence of all things. It did not come alone from academia, but it is an attitude in which academia is most comfortable. In a world of controlled analysis, this is all very sophisticated. But as a guide to

action, the interconnectedness of all things is a characteristic of highly primitive thinking. Note that I said *re*discovery of the interdependence of all things. Granted that the modern notion of interdependence is logical and rationalistic, rather than holistic and mysterious. But the results are about the same: Anxiety, stalemate and resignation to a higher authority. Once interdependence is embraced, a particular problem expands beyond imagination. It is one thing to experience a spewing smokestack and to propose legislation to reduce or eliminate the discharge. It is quite another to ordain "a healthy ecosystem" within which a spewing smokestack may be derived logically as something against which an agency might wish to make a rule or regulation. Again, it is one thing to experience the acquisition of a competitor and to legislate against that practice and to order administrative agencies to carry out the legislation; it is quite another thing to legislate "fair competition" and to delegate the responsibility for producing fair competition to a regulatory commission. It is one thing to pass a law protecting grass in parks and to authorize an agency to say "Get off the grass"; it is quite another thing to legislate "grassness" as a guideline for agencies operating in an abstractly defined ideal community.

Since a systems approach to a particular action boggles the imagination, it is no wonder that we have found ourselves resorting less to rules of law and more to broad and undefined delegations of authority to administrative agencies. And it should be no surprise that agencies are also boggled by the burden and will then contrive, with the help of academic advice on systems analyses, a formula or a decision-making model of some sort. This may make their abstract universal system more manageable, and will almost certainly help the agencies politically if they can appear to be deriving some or all of their rules and regulations from a scientistically plausible concept. But it does not give them the key to a successful mission. One critic of the new systems analyses has referred to this as a tendency to "combine tunnel vision with intellectual imperialism." (Richard Nelson, *The Moon and the Ghetto*, p. 19.)

In sum, academic science, including social science and especially economics, deals best with experience by removing it from the senses. As a guide to public policy, this point of view tends to produce abstract definitions of the problem, removal from data to indicators, and abstract and universalized instructions to agencies. This amounts to no mandate at all, and that in turn makes agencies and legislators more and more desperate for something to provide a functional equivalent to a mandate. They seek more filler from outside advice, and they get more and more abstractions, systems, systems analysis and systems of analysis, all of which tends to exacerbate the problem all the more. Once a decision-making model or *modus operandi* of some sort

has been worked out, it is only natural that the agency would hold on to it for dear life and would seek endorsements masquerading as outside advice. Natural scientists and social scientists in the universities are particularly comfortable in this new environment of abstract policies with universalized definitions of policy goals. However, since these abstractions tend to produce poor legislation in that they deprive the administrators of their mandate and their rules of law, it is possible to argue that universities have virtually a trained incapacity for governing. Government must let its agenda be determined by reactions to public opinion, interest groups and unexpected events. University researchers must seek their agendas from the state of the art — from the logic of their theories, their research and their findings. We don't really want theoretical policy any more than we want representative research. But that's what we tend to get in a partnership where each side sets the agenda for the other.

Yet, appearances to the contrary notwithstanding, I come here not to bury universities, but to praise them — for what they can do — while trying at the same time to define their limits. As a lifetime member of university faculties, I am particularly concerned that we do not harm ourselves and our legitimacy in the society by unfounded intellectual imperialism. As for the particular strengths of the university, I find that I cannot improve upon my propositions of six years ago, and so I will repeat them, but briefly. Then I will turn to the other side.

First and foremost the university is our best hope for improving the brain pool of the nation, and if the university is to be imperialistic, let its expansion be in the form of extending its educational functions beyond the campuses.

Second, the university, as long as it remains independent, can evaluate claims to expertise. Although the university will always be limited in its ability to turn out instant experts, it can provide experts on experts. For example, we should be inventing civil service examinations, not taking them. We should be unmasking and criticizing professional expertise, not marketing our own.

A related strength of the university is its ability to evaluate and criticize claims to evidentiary authority. On what basis can psychiatrists claim the presence or absence of sufficient moral responsibility? What is "unemployment"; what are the factors that make up the unemployment index, and what are its biases? What is the so-called cost of living index? What is so-called fair value or market value in an eminent domain proceeding? What costs are left out of a cost-benefit analysis? What indeed is a fact? What indeed is evidence, in a society where most publicly known facts are really indicators and are not experienced facts at all?

The fourth strength identified in the earlier statement was the ability of the university to evaluate claims to public opinion support. The need for such an evaluation, and the ability of truly independent universities to engage in this kind of evaluation is self-evident.

Now to the other side. Governments will go beyond these four strengths. That is inevitable. I accept that, while saying that it does so at its PERIL. The requirements for good government are just that different from the requirements of a good university. My message to state governments can be read on any pack of cigarettes: Warning: Universities can be hazardous to your health — and to their own. Don't try to make academia and government too much the same. So, don't rent your academicians, as advisors, contract researchers, or endorsers. Don't rent them; *hire them* — preferably fresh out of college or graduate school — and train them to use their analytic skills for *your* mandate. And encourage them all the while to develop a respect for the particular. Second, when the agency mandate is so universal and so open-ended as to be no mandate at all, don't go to university analysts and researchers to define a mandate. Go instead back to the legislature. Insist on a clearer and more particularized mandate, and refuse to act until the mandate is clarified. In the meantime, keep the university at arm's length by helping it in the traditional manner that produced the great independent universities in the first place: that is, by unconditional assistance, on the assumption that the university can best serve by improving the brain pool and by maintaining an independent posture of criticism and evaluation. Above all, maintain the separation of powers between universities and the state by recognizing the inconsistency of functions. Universities attempt to improve upon experience by removing it from the senses, by abstraction. Governments attempt to improve upon experience by experiencing it, in order to facilitate good conduct and inhibit bad. A good abstraction and a tightly logical system based upon abstraction is and should be a thing of joy to an academician. When such constructions begin looking good to public officials, they should repeat as a catechism the caption of a cartoon on military planning by Bill Mauldin: A military aide is standing on an Alpine peak with his general, poring over a large map. The aide is saying: "According to our calculations, General, sir, we are on that peak right over there."

Illinois is fast approaching another of those many opportunities to copy California — this time in the form of the so-called Policy Seminar. If this were nothing more than a state-supported NSF, there would be nothing to shout about. We wouldn't even be here at such a conference. But since it is more like RANN (Research Applied to National Needs) and involves the diversion of scarce research money toward contract research — i.e., toward

Research Applied to *Agency* Needs, "RAAN," this so-called partnership has to be examined with suspicion. This is not a low-risk opportunity. So, as the euphoria mounts this weekend, I hope you will be asking yourselves at least two sobering questions: Considering Proposition 13, does every California innovation deserve imitation? And, considering the particular virtues of university policy analysis, just which hill, or should I say summit, are we really on?

[At the conclusion of Dr. Lowi's address, Dr. James Hartnett and Mr. John Cummins provided reactions to these remarks.]

PERSPECTIVES OF STATE GOVERNMENT–UNIVERSITY COOPERATION: A LEGISLATOR'S POINT OF VIEW

John Vasconcellos

I picked up in Sam's comments, about dealing with "politicians and other flaky people," a comment about politicians. It reminded me of a situation five years ago when Jack Bunzel was appointed president at San Jose State University. He brought his top staff to the Capitol for lunch one day, and we conversed about higher education. I had then spent three years specializing in higher education legislation and financing. We talked for fifteen minutes about pedagogy and philosophy, existentialism and epistemology, and then Bunzel turned to his vice-president and said, "I didn't know we could talk to legislators about such important matters." I said, "Jack, that's a terribly condescending statement." He replied, "Oh no, it's very flattering."

Hopefully, contrary to stereotypical expectations, legislators (even politicians) have enough to say, to make it worthwhile for you, for me to have come 3,000 miles. I was surprised by your invitation, pleased and flattered by it. It strikes me as incongruous, both in time and in place. Back there, I'm running for reelection. Here, I am keynoting a conference 3,000 miles from my district. You're gathered with some sense of family, a community of scholars, human beings laboring together in postsecondary education. Here am I, a stranger in your midst, wondering how I can be present in a significant way, in an hour or less.

So, I come from California, the "land of milk and honey," the American frontier, the place of Proposition 13. In many ways California often seems to be that place where our future comes into focus first. We, who live and work in California, are trying to make sense of what are tumultuous and difficult times. Hopefully, sharing my experiences in California postsecondary education will demonstrate our struggles and our efforts, and prove useful to you facing similar situations, especially as related to the issue of public policy research.

I'm now completing twelve years in the California Assembly. In my third year, without even being asked, I was appointed to the Joint Committee on Higher Education, created by Jesse Unruh, then Speaker of the Assembly, to buffer the campuses from the politicians during the days of student un-

rest. In my fifth year, 1971, we created a joint committee to study the master plan for California's postsecondary education. I chaired that committee. You may be familiar with our report. In my seventh year, 1973, the Assembly created a permanent postsecondary education subcommittee; I became its chairman and have held that post ever since. At that time I also became chairman of our Ways and Means Subcommittee on Education, which reviews all California education budgets, from preschool through postgraduate. I've held the Ways and Means Subcommittee chair for five of the last six years. (In 1975, I was banished for supporting the wrong person for speaker.) The last two years I've been appointed one of three Assembly persons to serve on our Joint Budget Conference Committee which prepares the final state budget.

Certainly, then, my legislative responsibilities immerse me in California postsecondary education. Some persons in the academic world dread the fact I have both the policy and the fiscal chairmanships. They feel it's an unwarranted amassing of power. Others are delighted by the fact. The conclusion seems to depend upon the perceptions and perspectives of the persons observing.

When I first began working in postsecondary education, the attitudes of our legislature and governor were very traditional. The academic community had enormous independence, influence, and mystique, and was allowed to function without much questioning or justification. Earlier I'd spent the year 1960-61 as former Governor Pat Brown's travel secretary. As I recall, whenever Clark Kerr said "We want money," Pat Brown said, "How much?" When Clark Kerr said "jump," Pat Brown said "How high?" I don't mean that derogatorily of either of them: I have great respect for Clark Kerr; I owe to Pat Brown my entry into politics. I have great respect and affection for him.

But to properly understand the transition in California education, we must acknowledge that our society has largely outgrown its willingness to surrender authority to mystique. Twenty years ago — even ten years ago — legislators were by-and-large accepting of and sometimes intimidated by academics. They were not as well-educated, nor self-confident, and tended to defer and agree without raising serious questions. What we've seen in California is that postsecondary education has so well educated enough of us that we're no longer willing to be mystified and awed, and willing to respond blindly to its every demand.

The California Legislature has a new breed of legislator. Californians amended our constitution in 1966 and made us a full-time legislature. We're in session every year from New Years until mid-September. That scheduling has changed the character of persons getting elected. In the Assembly, out

of our eighty members, forty-three have been newly-elected in the last four years. If I'm reelected this year, I'll be eighth in seniority in our House. So we've experienced the election of younger, better prepared, better equipped, full-time legislators who become involved in the operations of the institutions of postsecondary education. We're willing, even determined, to ask questions like "Why are you doing this?" and "Why do you need that much money?" and "How are you responding to our changing world and people's emergent needs individually and societally?"

The initial academic response when we began asking questions was one of intense hostility, resentment, and even paranoia. It hit a peak one day when Gordon Duffy, a Republican colleague on our budget subcommittee, began asking questions of the university's chief lobbyist and vice-president. The chief lobbyist rose in anger and said, "You have no right to ask us these questions. You're trying to run the University." Gordon was infuriated. For two or three years it was mostly hostility, open warfare between us. Any question we asked was resented, only reluctantly and minimally answered. Confrontations developed which precluded building any sense of confidence or credibility in the university by the legislators (and vice versa). Our questions were intended to focus attention on the purposes of postsecondary education. The responses seemed neither forthright nor helpful.

Amidst these skirmishes, we addressed the issue of public policy research. It began largely with my Democratic colleague, Charlie Warren, our Assembly energy expert. He's now President Carter's chairman of the Council on Environmental Quality. Charlie was one of the first to talk about "limits to growth," the hunger crisis, the population crisis, the energy crisis. He attended the Rome conference and traveled the world learning about all these things. When he returned to California, he was unhappy that our university, with its vast and diverse research capacities, had not done nearly enough to advise us in government so we'd be equipped to make vital long-range decisions. He pursued the university time and again, for three years in budget hearings, about the university's research responsibility to the public. As legislators, we're the persons the public chooses to govern our 22 million people in California. We believed the university (which we fund in the hundreds of millions of dollars) ought to be helping us learn how to solve the problems facing us in our state and government. Our public couldn't afford our breakdown in communications. It was irrelevant who was to blame.

Finally, events moved us toward reconciliation. Somehow we got through much of the distrust. The University of California appointed a new president, David Saxon, who seemed much more willing to recognize that legislators could be intelligent and decent and caring human beings who ought not be written off as "other flaky people" — that we could engage in some

kind of mutually, reciprocally-enhancing discourse. About the same time, I introduced a bill to create the California Policy Research Foundation. I was concerned that we were not able to exercise our responsibility sufficiently in this time of real societal crisis in California, and across our nation. There was the university with all its talent and with the $50 million the state appropriated each year for research — unstringed and untrammeled — and there was neither sufficient trust nor adequate sharing between us. My bill would have taken $2 million of the university's research budget, added $2 million more, and created a joint policy board consisting of legislators and representatives of the executive branch, as well as research professors. The object was to bring together, in a bilateral effort, a public policy research operation in California.

To the university's surprise, I got that bill approved by our Postsecondary Education Subcommittee and our full Education Committee before it was killed in our fiscal committee — after intense university lobbying. The following year, David Saxon created the California Policy Seminar, utilizing existing University funds. He asked the Governor and two appointees, six UC research professors of various disciplines, and six legislators to serve together on a board that would make an effort to involve our university in researching critical public policy issues. I think it can be said that two years later — (it's better said by David Saxon and by John Cummins than by me) — we are now mutually delighted with what has happened. We have found a way to work *together* to respond to public needs, in a way that maximizes *and combines* our respective talents *and* has begun to build some trust between us.

Our California Policy Seminar, though still incipient, has provided occasion for us to meet three or four times a year for discussion. It's allowed us to begin to build the kinds of relationships that are necessary if we are going to maintain both our government's capacity to deal with critical emerging societal problems and the university's need to remain autonomous, while at the same time recognizing and responding to its public service responsibilities. A public university must recognize its obligations to the public which created it (in our case, through the constitution ratified by the people of our state), and which supports it. It's not simply created for some esoteric or idiosyncratic reason. The university has missions and functions that are desperately needed in our society today. In California we've found we can come together, break down our distrust, build up the kind of relationship that is the critical foundation of any cooperative effort.

Passage of Proposition 13 in California has given all of us in the university and in state government much food for thought. What it means, in effect, if not intent, is a profound shifting of dollars away from our public sector, to

our private sector. Some economists say that revenues lost from property taxes will come back in multiple dollars. I'll believe that when I see it. At this point, we've lost $7 billion in property tax revenues for our current fiscal year; this will increase by a billion dollars each year in the years to come. Because of an unexpected fat state surplus, we were able to make up $4 billion of that $7 billion loss this year. But that came partly at the expense of no salary increases for any public employee in California — state, university, school, city, county, fire, police, special district, or otherwise. Next year we're going to see a greater shortfall of funds since we will be unable to deny pay increases to our deserving public employees for a second year in a row. We'll see a tighter squeeze.

I thought about coming and talking primarily about the legislative pressure that went into the development of public policy research in California, but that's not a sufficient model to present to you. First, your legislature may not be as inclined as ours to activism; second, it's not always sufficient, and never ideal, to evoke motivation by threat. What I much prefer is that you who choose the responsibility to make your lives and careers in a public university, would recognize your responsibility to the public. You'd ideally want to find ways (not trammeled by old stereotypes about politicians) to utilize your time, energy, talent and resources — to help our society recuperate from its predicament.

My hope and my invitation — to my colleagues in our legislature and academics in California and here — is that we who undertake this task recognize how essential our talents are in fulfilling the public trust. Only if our university and our legislature and all of government are able and willing to pool our talents, and find ways of getting through our reciprocal skepticism, is it likely that our society has a hopeful future. The breakdown of our institutions (families, churches, schools, governments, the university), our shifting population figures, our environment and energy crisis, our economic crisis of inflation — all make it incumbent upon all of us to use our talents to illuminate the problems, to bring about enlightened and wise public policy decisions.

I read one Assembly background paper in the car this afternoon on the way from O'Hare Airport, which talked about how skeptical we might be of each other. It expressed concern about how politicians might try to suppress information resulting from research and how government addresses short-term policy crises, while you academics are involved in doing long-term research. Let me speak to that perspective.

First, if you know your own legislators at all, if they're at all like the California legislature, you'll find they're more concerned about solutions than protective of particular positions. While no one of us humans is ever free of

biases, when we look to research in California we really make an effort not to have things unpublished or closed, not to have things predetermined. We're interested in finding out — from supposedly and hopefully the best minds in our society — the truth of the facts in the matters which confront us as a society. We know now that there's no way we can truly solve our problems if we don't, in fact, understand what those problems are. You academics ought to be the most qualified to clarify the issues. There's simply no way we can adequately inform ourselves on everything to be able to make the wisest decisions on every issue. We simply do not have nearly the kinds of resources that our University of California has. Very simply, we know we need the university and its vast capacity for research — to help in our struggle.

Second, I resist the argument that legislators are only concerned with short-term problems, while academics are long-term visionaries. If all we legislators are doing is coping with current crisis, it's no surprise that we're failing as a government to solve the problems in our society. We need to look for the root causes of our problems. We need you academics to advise us about *how* we can look deeper into our problems, search out the root causes, do some long-term system changes. In California, we have legislators (whose election is primarily a credit to our electorate) who are not simply band-aid persons, but persons with deep-seated concerns, and with good minds and hearts and vision.

Government now needs approaches that are long-term, basic, and theoretical as well as applied. We need to adopt the same approaches that the university proposes for studying any complex issue. Government can't get along without academe. Some may think the effort to move universities toward public policy research is an effort to take over the university. Instead I think it's an effort to *enlist* the university, to *enlist* you academics at a crucial point in the history of our society, at a time when learned expertise is essential to our very survival.

Another objection I read was that government deals with things interdisciplinary, while academics are structured departmentally, and that academics can't function when legislators have the bucks. There's a lot of truth to that, but it's a poor reason for not cooperating with the government. The government is us, you and me, not something alien "out there." The government is the people we choose to go to the Capitol and serve us for a designated term. My experience in the Capitol has been that any effort to solve a major social problem which is narrow, confined and a reaction to a particular problem, seldom proves effective, often even proves counter-productive. Efforts which don't look broadly at the causative dynamics of a problem and how to address it in a reasonable fashion, are likely doomed to failure. While there's some merit in being excellently disciplined, it should be at least equally

meritorious to be excellent holistically, to be a renaissance person, to be a person who does research with broad causal and policy implications.

We can and must truly bring ourselves together along these lines. The arguments against a university doing public policy research, against formalizing an effort toward public policy research, may well proceed from obsolescent, if not already obsolete, assumptions: that politicians are a bunch of dummies and hacks who want to run everyone's lives; that academics are a bunch of elitists in the ivory tower who don't care much about anybody else. Neither of us can any longer afford those old assumptions. We must begin to reach out, to step out, to touch and experience each other. We'll find that we are human beings with common aspirations and common fears, who share a time and space on this earth, that we can mutually benefit from our cooperative efforts.

The Policy Seminar in California has facilitated our finding out what we need to know. By getting together and bilaterally reviewing our problems and designing our research, we can help each other understand what we need to have to inform ourselves. Your academic community can evaluate the state of the art of research and determine how to broaden our focus so that pertinent policy issues can be investigated. We can then chart the study together. That is critical and valuable to our collaboration.

Among other issues that come to mind in evaluating whether or not to engage in policy research, a major twofold issue is academic freedom and institutional autonomy. In California, we began asking for more attention to public policy needs as a basis for designing and choosing research. The university resisted, claiming constitutional autonomy. It's leaders tried to persuade me over the years that its constitutional autonomy was all that made it a great university. I was pleased tonight to be advised by your president that you are not constitutionally autonomous. I wouldn't expect you to tell me that you are not, therefore, a great university — as great a university as the University of California. I hope you wouldn't want to argue that with me.

The issue of academic freedom comes up and is certainly a valid concern. It is probably the central issue which we all need to address candidly. I believe it can be fairly said that in California we have made no effort, no effort at all, to prohibit anybody from doing any research. We've had one bill on farm mechanization. It didn't get out of committee. That's the only bill I've even seen so far. We've asked many questions. We'll keep on asking many questions. But we're more inclined to commission research than to stifle it, to ask for research and to fund research that might teach us what we need to know to make our decisions more wisely.

Another argument I came across today was that if policy research is too controversial, it might adversely affect the institution in the budget process.

As President Corbally pointed out earlier, autonomy (even where constitutional) is somewhat a myth; because we legislators have the money you want, rightly or wrongly, we allocate your money. That's our responsibility. Those of us who take it seriously are no longer doling it out to anyone very freely. We are willing to fund what we perceive (and perception is the key to so much of all decision making) as an actual response to the needs of the public. In California when the university moved *toward* the establishment of the California Policy Seminar, when it moved internally *toward* actively implementing affirmative action programs, the university faired better with my budget subcommittee (granting it didn't with the co-relative Senate Subcommittee).

In California, we've come through some difficult times between the government and the University of California and all of postsecondary education. I think we've gotten through the worst of those times. We got through them because we made the effort to spend time person-to-person, side-by-side, at dinner, at meetings of our Policy Seminar. We didn't just meet across the table during the course of budget hearings (where the atmosphere is more likely adversarial, critical and heated). We're succeeding because our dialogues extend to quiet times where we're able to get some deeper sense of our common concern and our common commitment to improve the quality of life and overcome the divisiveness of our times.

So I would hope that in Illinois, like in California, it might prove possible for you in your university to formulate and undertake an explicit effort to involve yourselves with your state government in public policy research. I hope you'll do it — not because you're being coerced by some legislators, but because you can envision more broadly your capacity to affect more actively the public life of your state and society.

I trust you will take the question and my invitation seriously. Only you, of course, can decide how best to operate and cooperate in your own lives, in your own institution, with your own state government, in your own state, Illinois. I wish you well.

[At the conclusion of Mr. Vasconcellos' address, Dr. Alexander Schmidt and Dr. James Heins provided reactions to these remarks.]

AUTHORS AND SPEAKERS

AUTHORS AND SPEAKERS

JOHN W. AHLEN, staff scientist, Illinois Legislative Council, Springfield, Illinois

MICHAEL A. BELLETIRE, deputy director for social services, Illinois Department of Public Aid, Springfield, Illinois

RABEL BURDGE, associate professor, Institute for Environmental Studies, University of Illinois, Urbana-Champaign Campus

JOHN CUMMINS, director, California Policy Seminar, Institute of Governmental Studies, University of California, Berkeley

NOEL G. EBRAHIM, assistant to the governor, State of Illinois, Chicago Illinois

MARILYN L. FLYNN, assistant professor, School of Social Work, University of Illinois, Urbana-Champaign Campus

JAMES P. HARTNETT, director, Energy Resources Center, University of Illinois at Chicago Circle

RUTH M. KELLY, research associate, Institute for Environmental Studies, University of Illinois, Urbana-Champaign Campus

THEODORE LOWI, professor, Department of Government, Cornell University, Ithaca, New York

ALEXANDER M. SCHMIDT, M.D., vice-chancellor for health services, University of Illinois Medical Center Campus

JAMES STUKEL, director, Office of Energy and Office for Interdisciplinary Projects, University of Illinois, Urbana-Champaign Campus

JOHN VASCONCELLOS, assemblyman, State of California, Sacramento, California

ROY WEHRLE, professor of economics, Sangamon State University, Springfield, Illinois

PETER E. YANKWICH, vice-president for academic affairs, University of Illinois

PARTICIPANTS AND STAFF

DANIEL ALPERT
Director, Center for Advanced Study
Urbana-Champaign Campus

JOAN ANDERSON
Director, Illinois Department of Registration and Education
Springfield

TRUMAN O. ANDERSON, M.D.
Executive Dean, College of Medicine
Medical Center Campus

LYNDON BABCOCK
Director, Environmental Health Science
School of Public Health
Medical Center Campus

*ROBERT J. BAKER, M.D.
Department of Surgery
Medical Center Campus

THOMAS W. BECKHAM
Dean, School of Associated Medical Sciences
Medical Center Campus

MICHAEL A. BELLETIRE
Deputy Director for Social Services
Illinois Department of Public Aid
Springfield

**JANE RAE BUCKWALTER
Associate Vice-Chancellor for Urban and Governmental Affairs
Circle Campus

RABEL BURDGE
Institute for Environmental Studies
Urbana-Champaign Campus

†SHIRLEY BUTTRICK
Dean, Jane Addams School of Social Work
Circle Campus

**JAMES COLLIER
Director of Public Affairs
Urbana-Champaign Campus

JOHN E. CORBALLY
President
University of Illinois

* Assembly Planning Committee. Members unable to attend the assembly were Thomas Jenkins (Circle), Alan Voorhees (Circle), Allen W. Anderson (Medical Center), Geoffrey A. Cordell (Medical Center), Barbara J. Stevens (Medical Center), Samuel Aldrich (Urbana-Champaign), Ben B. Ewing (Urbana-Champaign), and Louis R. Pondy (Urbana-Champaign).

** Member, University Committee on State Government/University Relations. (Samuel Aldrich [Urbana-Champaign] was unable to attend.)

† Round-table Chairperson

†† Reactor to assembly speech

Robert Corcoran
Assistant to the Governor on Education
Springfield

Morton C. Creditor, M.D.
School of Basic Medical Sciences
Urbana-Champaign Campus

Robert Crowson
College of Urban Sciences
Circle Campus

††John Cummins
Director, California Policy Seminar
Institute of Governmental Studies
University of California
Berkeley

*Dennis A. Dahl
**Associate Vice-Chancellor for Academic Affairs
Urbana-Champaign Campus

*Viron Diefenbach, D.D.S.
**Acting Dean, School of Public Health
Medical Center Campus

Robert H. Dobberstein
Pharmacology/Pharmacognosy
College of Pharmacy
Medical Center Campus

Noel G. Ebrahim
Assistant to the Governor
State of Illinois
Chicago

Samuel S. Epstein
Director, Environmental Health Resources Center
Medical Center Campus

*Marilyn L. Flynn
School of Social Work
Urbana-Champaign Campus

Gary L. Fowler
Department of Geography
Circle Campus

Edwin L. Goldwasser
Dean, Graduate College
Urbana-Champaign Campus

William J. Grove, M.D.
Vice-Chancellor for Academic Affairs
Medical Center Campus

Robert L. Hall
Director, Office of Social Science Research
Circle Campus

Thomas R. Hanna
College of Nursing
Medical Center Campus

*††James P. Hartnett
**Director, Energy Resources Center
Circle Campus

††A. James Heins
Department of Economics
Urbana-Champaign Campus

Moreland Herrin
Department of Civil Engineering
Urbana-Champaign Campus

Vivian Hickey
State Senator
Rockford

Lowell D. Hill
Agricultural Marketing
Department of Economics
Urbana-Champaign Campus

ELIZABETH HOLLANDER
Associate Director
Illinois Futures Task Force
Chicago

GRACE S. HOLT
Director, Black Studies Program
Circle Campus

LEWIS D. HOPKINS
Department of Landscape Architecture
Urbana-Champaign Campus

RICHARD HUTCHINSON
College of Pharmacy
Medical Center

HENRY JEFFAY
Acting Dean, School of Basic Medical Sciences
Medical Center Campus

RICHARD M. JOHNSON
Vice-Chancellor for Academic Affairs
Circle Campus

ROBERT D. KATZ
Director, Housing Research and Development
Urbana-Champaign Campus

*BOYD R. KEENAN
**Department of Political Science and Institute of Government and Public Affairs
Circle Campus

*LYMAN KELLSTEDT
Department of Political Science
Circle Campus

WILLIAM H. LANGEWISCH, M.D.
Rockford School of Medicine
Rockford

DANIEL M. LASKIN, D.D.S.
Head, Oral and Maxillo. Surgery
College of Dentistry
Medical Center Campus

JUDITH S. LIEBMAN
Department of Mechanical & Industrial Engineering
Urbana-Champaign Campus

*DAVID F. LINOWES
Harold Boeschenstein Professor Pol. Econ. and Public Policy
Urbana-Champaign Campus

THEODORE LOWI
Department of Government
Cornell University
Ithaca, New York

WILLIAM H. MARSHALL, M.D.
Peoria School of Medicine
Peoria

*ROSS J. MARTIN
**Associate Dean, College of Engineering and Director, Engineering Experiment Station
Urbana-Champaign Campus

JOANNE MCCLOSKEY
College of Nursing
Medical Center Campus

*JAMES T. MCGILL
**Associate Vice-Chancellor for Resource Planning and Allocation
Medical Center Campus

*CHRISTINE MCGUIRE
Center for Educational Development
Medical Center Campus

KENNETH MCMILLAN
State Senator
Bushnell

RICHARD M. MICHAELS
Director, Urban Systems Laboratory
Circle Campus

NICHOLAS MORAVCEVICH
Department of Slavic Languages and Literatures
Circle Campus

DARREL MURRAY
Department of Biological Sciences
Circle Campus

SARFARAZ NIAZI
Department of Pharmacy
College of Pharmacy
Medical Center Campus

JEFFREY C'CONNELL
College of Law
Urbana-Champaign Campus

CHARLES J. ORLEBEKE
College of Urban Sciences
Circle Campus

JOHN T. PFEFFER
Department of Civil Engineering
Urbana Campus

MICHAEL B. PRESTON
Department of Political Science and Institute of Government & Public Affairs
Urbana-Champaign Campus

MILTON RAKOVE
Department of Political Science
Circle Campus

*W. ANN REYNOLDS
**Dean, Graduate College
†Medical Center Campus

JAN ROCEK
Dean, Graduate College
Circle Campus

*WILLIAM F. SAGER
†Department of Chemistry
Circle Campus

* ††ALEXANDER M. SCHMIDT, M.D.
Vice-Chancellor for Health Services
Medical Center Campus

HARVEY SCHWEITZER
Assistant Director, Agricultural Experiment Station
Urbana-Champaign Campus

ALVIN D. SOKOLOW
Institute of Government and Public Affairs (Visiting from University of California, Davis)
Urbana-Champaign Campus

HOUSTON STOKES
Department of Economics
Circle Campus

*JAMES STUKEL
†Director, Office of Energy Research and Office for Interdisciplinary Projects
Urbana-Champaign Campus

ROBERT B. UNDERWOOD, D.D.S.
Associate Dean, College of Dentistry
Medical Center Campus

John Vasconcellos
Assemblyman
State of California
Sacramento

Donald Warren
Department of Policy Studies
Circle Campus

Roy Wehrle
Department of Economics
Sangamon State University
Springfield

Harriet Werley
Associate Dean for Research
College of Nursing
Medical Center Campus

Ralph Westfall
Dean, College of Business Administration
Circle Campus

David Whetten
Department of Business Administration
Urbana-Champaign Campus

†Arthur H. Wolff
Associate Dean, School of Public Health
Medical Center Campus

**Peter E. Yankwich
Vice-President for Academic Affairs
University of Illinois

Staff

**Samuel K. Gove
Richard A. Zollinger
Amy Gottlieb
Edith Terwilliger
Jean Baker
Sharon Hardman

Reporters

Daniel Brachman
(Medical Center Campus)

Rita Harmata
(Circle Campus)

James Pollicita
(Urbana-Champaign Campus)

Deborah Smith
(Urbana-Champaign Campus)

Jeanne Tessier
(Medical Center Campus)